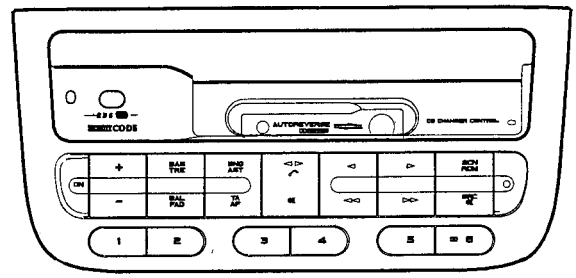
Cassette Car Radio 22DC722 /65X
22DC722 /65Z

Service
Service
Service



For repair information of the cassette deck see Service Manual N° 4822 725 25482 of Car cassette deck SCA4.3/H

Service Manual

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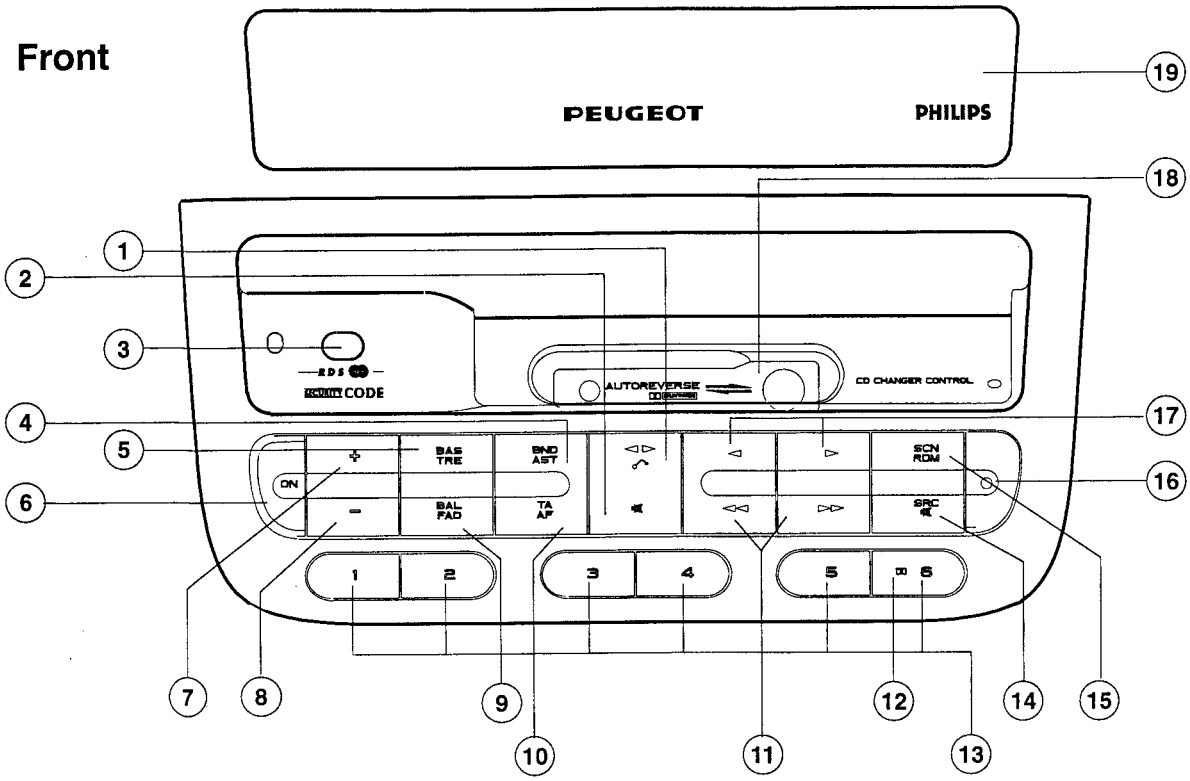
Subject to modification

4822 725 25874

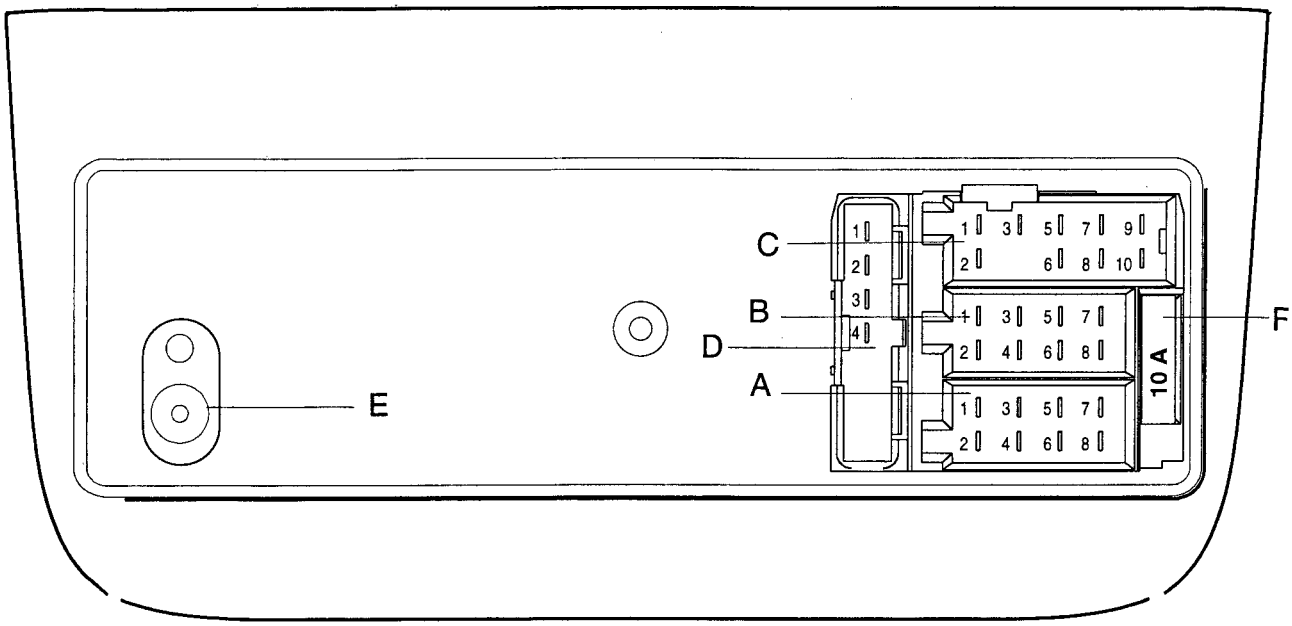
PHILIPS

Front



1	REVERSE / EJECT
2	OPEN / CLOSE FRONT SHUTTER
3	SWITCH CLOSE FRONT SHUTTER
4	BAND SELECTION / AST
5	BASS / TREBLE
6	ON / OFF
7	AUDIO +
8	AUDIO -
9	BALANCE / FADER
10	TA / AF
11	AUTOMATIC SEARCH / FAST TAPE
12	DOLBY SYSTEM
13	PRESET SELECTION
14	MODE / MUTE
15	SCAN / RANDOM
16	BLINKING LED
17	MANUAL SEARCH / TAPE MSS / CD TRACK
18	CASSETTE FLAP
19	FRONT SHUTTER

CONNECTIONS



A1	TELEPHONE MUTE	A : POWER SUPPLY	
A2	VAN DATA \		
A3	VAN DATA		
A4	+ PERMANENT POWER SUPPLY		
A5	+ SWITCHED (A5 + C7 = 300 mA MAX)		
A6	+ ILLUMINATION		
A7	+ IGNITION KEY		
A8	POWER SUPPLY GROUND		
		B : LOUDSPEAKERS SUPPLY (../65X)	B : LINE OUT (../65Z)
B1	REAR RIGHT +		GROUND
B2	REAR RIGHT -		GROUND
B3	FRONT RIGHT +		GROUND
B4	FRONT RIGHT -		GROUND
B5	FRONT LEFT +		OUTPUT REAR RIGHT
B6	FRONT LEFT -		OUTPUT FRONT LEFT
B7	REAR LEFT +		OUTPUT REAR LEFT
B8	REAR LEFT -		OUTPUT FRONT RIGHT
C1	BUS GROUND	C : CD CHANGER CONNECTIONS	
C2	D2B +		
C3	D2B -		
C4	(NO PIN)		
C5	+ PERMANENT POWER SUPPLY = A4		
C6	POWER GROUND		
C7	+ SWITCHED (A5 + C7 = 300 mA MAX)		
C8	LINE IN RIGHT		
C9	LINE IN LEFT		
C10	LINE IN GROUND		
C11	SHIELDING		
D1	NOT USED	D : REMOTE CONTROL	(LINKED TO A5)
D2	a1 = REMOTE CONTROL 1 IN		
D3	REMOTE CONTROL		
D4	a2 = REMOTE CONTROL 2 IN		
D5	NO PIN		
D6	NO PIN		
D7	NO PIN		
D8	SHIELDING		
E	AERIAL PLUG	E : AERIAL PLUG	
		According to ISO/DIS 10599	

TECHNICAL DATA

FEATURES
FM - LW - MW - RDS EON
SCA Deck
CD changer driver (D2B)
Remote display (VAN)
Security code always activated.

GENERAL
Power supply	:14.4V DC
Dimensions	:180x150x51 mm

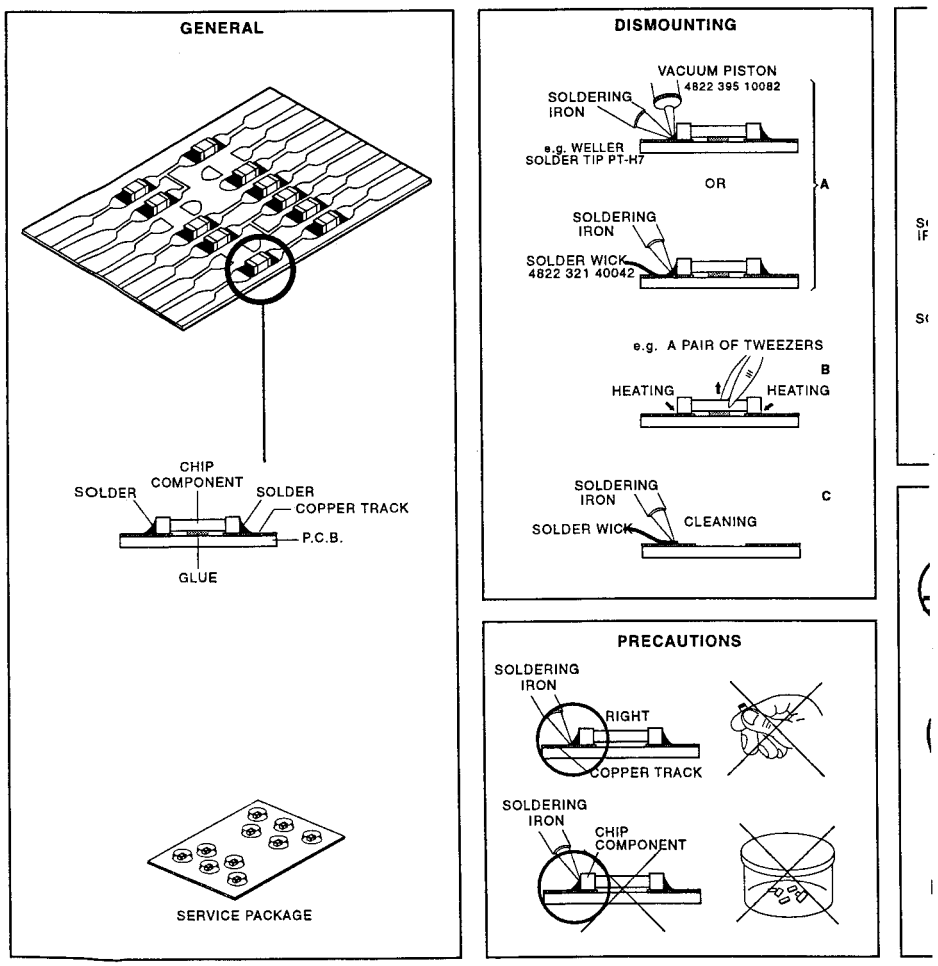
RADIO
LW	: 144-288 KHz
MW	: 531-1629 KHz
FM	: 87.5-108 MHz
IF-AM (1/2)	: 10.7 MHz/450 KHz
IF-FM (1/2)	: 72.2 MHz/10.7 MHz
Sensivity 26dB S/N	: 30 µV (LW)
	: 25 µV (MW)
	: 2.5 µV (FM)
Limitation α-3dB	: 3 < 5.5 µV <14 at T^o = 25°C

CASSETTE
Cassette mechanism	: SCA4.3
Number of tracks	: 2x2
Tape speed	: 4.76 cm/sec ± 2%
Wow and flutter	: < 0.3%
Crosstalk	: > 32 dB

AMPLIFIER
Output power	: 4x10 W / 4 Ω (D = 1%) (../65X)
4 X Line out	: (../65Z)
Fader control	: >35 dB
Balance control	: >35 dB
Bass control	: +11.5dB ± 3dB
Treble control	: +10dB ± 3dB
Channel separation	: >40 dB
Input sensibility CD in (for 1W)	: 75mV ± 2dB

-THIS SET IS USED IN COMBINATION WITH A REMOTE DISPLAY AND A REMOTE CONTROL.
-IN CASE YOU NEED SUCH DEVICES, PLEASE CONTACT LOCALLY PEUGEOT TO GET INFO ABOUT THESE DEVICES AND THEIR CONNECTION CABLES.

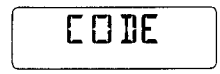
HANDLING CHIP COMPONENTS

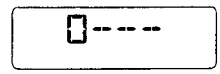


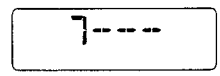
Security Code

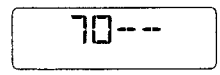
This set is protected by a security code. This code cannot be deactivated.
Each time the set is disconnected you will have to enter the code.

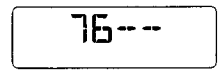
Entering the code: Suppose that the code is 7637

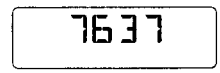
Set ON. The display shows..... 

Press preset 1. The display shows..... 

Press UP or DOWN until the display shows..... 

Press preset 1 The display shows..... 

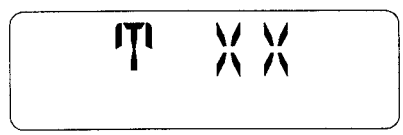
Pres UP or DOWN until the display shows..... 

and so on until the display shows..... 

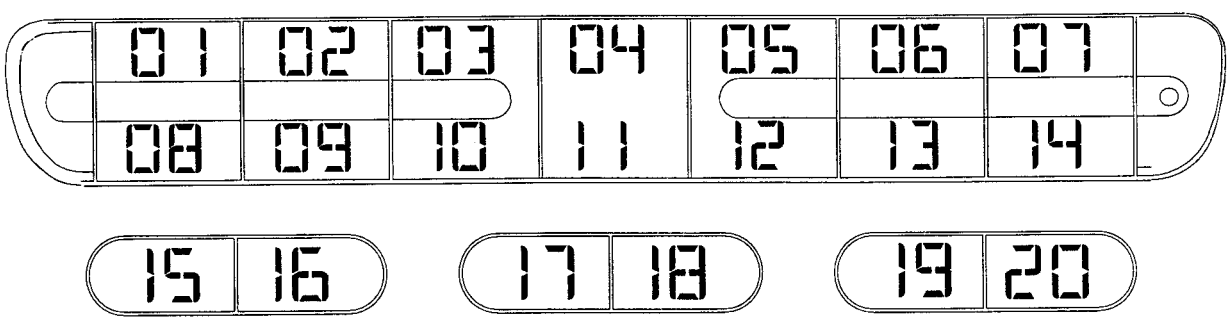
Press preset 1 : The set bleeps and starts operating.

Keyboard test

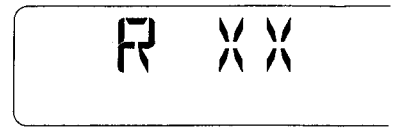
This test detects short circuits in the keyboard. If there is a short circuit, the display shows FALSE
This test is called by turning the set on while pressing key 3.

The display shows: 

Press each key, in any order. The display will show the number of the key pressed according to the following:



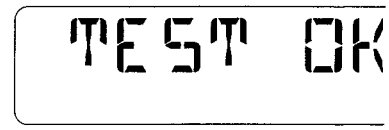
When each key has been pressed, and if there is no problem, the display shows:
Now starts the test of the remote control.



Press "MODE" on the remote control. The display shows

Press "SEARCH UP" on the remote control. The display shows

If the test is ok, the display shows



You can exit the test mode by switching the set OFF.

ESD

WARNING

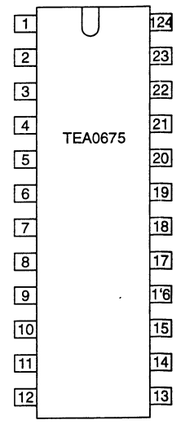
All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically.
When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools also at this potential.

SAA6579T Radio Data System demodulator

SYMBOL	PIN	DESCRIPTION
QUAL	1	quality indication output
RDDA	2	RDS data output
V_{ref}	3	reference voltage output (0.5 V_{DDA})
MPX	4	multiplex input signal
V_{DDA}	5	+5V supply voltage for analog part
V_{SSA}	6	ground for analog part (0V)
CIN	7	subcarrier input to comparator
SCOUT	8	subcarrier output for reconstruction filter
TCTR	9	test control
TEN	10	test enable
V_{SSD}	11	ground for digital part (0V)
V_{DDD}	12	+5V supply voltage for digital part
OSCI	13	oscillator input
OSCO	14	oscillator output
T57	15	57kHz clock signal output
RDCL	16	RDS clock output

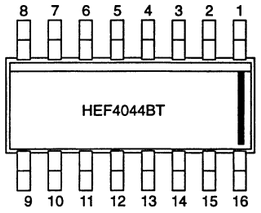
TEA0675 Dual Dolby B-type noise reduction circuit

SYMBOL	PIN	DESCRIPTION	SYMBOL	PIN	DESCRIPTION
OUTA	1	output channel A	INB2	13	input channel B2
INTA	2	integrating filter channel A	HS	14	headswitch input
CONTRA	3	control voltage channel A	INB1	15	input channel B1
HPA	4	high-pass filter channel A	GND	16	ground
SCA	5	side chain channel A	EQFB	17	equalizing input channel B
TD	6	delay time constant	EQB	18	equalizing output channel B
EQA	7	equalizing output channel A	AMSEQ	19	AMS output and EQ-switch input
EQFA	8	equalizing input channel A	SCB	20	side chain channel B
VCC	9	voltage supply	HPB	21	high-pass filter channel B
INA1	10	input channel A1	CONTRB	22	control voltage channel B
VREF	11	reference voltage	INTB	23	integrating filter channel B
INA2	12	input channel A2	OUTB	24	output channel B



HEF4044BT Quad R/S latch with 3-state outputs

SYMBOL	PIN	DESCRIPTION
O_3	1	3-state buffered latch output 3
n.c	2	
$\overline{S}_0$	3	set input 0 (active LOW)
$\overline{R}_0$	4	reset input 0 (active LOW)
E0	5	common output enable input
$\overline{R}_1$	6	reset input 1 (active LOW)
$\overline{S}_1$	7	set input 1 (active LOW)
V_{SS}	8	ground
O_1	9	3-state buffered latch output 1
O_2	10	3-state buffered latch output 2
$\overline{S}_2$	11	set input 2 (active LOW)
$\overline{R}_2$	12	reset input 2 (active LOW)
O_0	13	3-state buffered latch output 0
$\overline{R}_3$	14	reset input 3 (active LOW)
$\overline{S}_3$	15	set input 3 (active LOW)
V_{DD}	16	supply

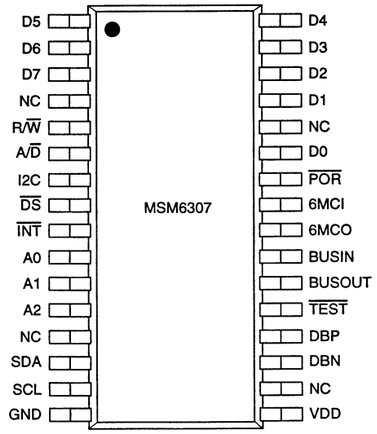


FUNCTION TABLE

inputs			output
E0	$\overline{S}_n$	$\overline{R}_n$	O_n
L	X	X	Z
H	L	H	H
H	X	L	L
H	H	H	latched
Z = high impedance OFF-state			

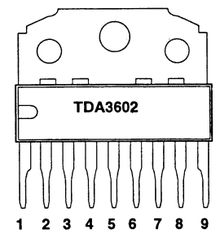
MSM6307GS D^2B IC

SYMBOL	I/O	DESCRIPTION
$\overline{POR}$	I	Power on - reset
R / $\overline{W}$	I	Read / Write selector
$\overline{DS}$	I	Data strobe to access data bus
A / $\overline{D}$	I	Selects address or data on D0 ~ d7
SDA	I/O	I^2C data signal input / output
SCL	I/O	I^2C clock signal input / output
I2C	I	Selects I^2C or parallel interface
$\overline{INT}$	O	Interrupt output
BUSIN	I	D2B input (TTL level)
BUSOUT	O	D2B output (TTL level)
DBN & DBP	I/Os	Differential D2B lines of the internal driver/ receiver, to be terminated with 60Ω
$\overline{TEST}$	I	Selects the test mode for factory purposes
6MCI	I	Clock input 6MHz resonator or X-TAL
6MCO	O	Clock output 6MHz resonator or X-TAL
D0 ~ D7	I/Os	8-bit bi-directional address or data bus
A0 ~ A2	I	Programmables I^2C slave addresses



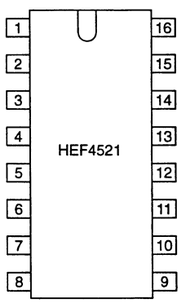
TDA3602 Multiple output voltage regulator

SYMBOL	PIN	DESCRIPTION
V_P	1	positive supply voltage
REG1	2	regulator 1 output
RESET	3	reset output
SCI	4	state control input
HOLD	5	hold output
GND	6	ground
REG3	7	regulator 3 output
V_{bu}	8	back-up
REG2	9	regulator 2 output



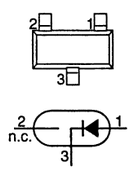
HEF4521BP 24-stage frequency divider

SYMBOL	PIN	DESCRIPTION
O_{24}	1	output 2^{24}
MR	2	asynchronous master reset
$V_{SS'}$	3	
O_2	4	
$V_{DD'}$	5	
I_2	6	
O_1	7	
V_{SS}	8	ground
I_1	9	
O_{18}	10	output 2^{18}
O_{19}	11	output 2^{19}
O_{20}	12	output 2^{20}
O_{21}	13	output 2^{21}
O_{22}	14	output 2^{22}
O_{23}	15	set input 3 (active LOW)
V_{DD}	16	power supply

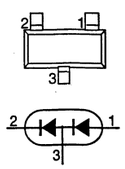


DIODES

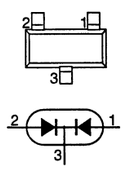
BAS2 16



BAV 99

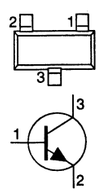


BAV 70

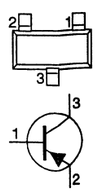


TRANSISTORS

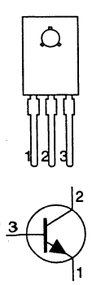
BC847B / BFS19



BC857B



BD437 / BD675



DC VOLTAGES

All measurements in FM, set tuned, 0dB at output.
All settings in mid position. Values are given for indication only.

IC96 TUNER MODULE

1 = 0.5 V
2 = GND
3 = N.C.
4 = N.C.
5 = N.C.
6 = 5.0 V
7 = 8.5 V
8 = GND
9 = 5.0 V
10 = 5.1 V
11 = 3.2 V
12 = 5.0 V
13 = 5.0 V
14 = 5.0 V
15 = N.C.
16 = 3.8 V
17 = 3.8 V
18 = GND
19 = N.C.
20 = N.C.

7257 LA2000

1 = 1.8 V
2 = 7.3 V
3 = 2.1 V
4 = N.C.
5 = GND
6 = 5.0 V
7 = N.C.
8 = N.C.
9 = 8.5 V

7350 TDA8579T

1 = 3.9 V
2 = 4.5 V
3 = 3.8 V
4 = 5.0 V
5 = GND
6 = 4.4 V
7 = 4.4 V
8 = 8.5 V

7354 TEA6320

1 = 5.0 V
2 = GND
3 = 4.0 V
4 = 3.9 V
5 = 3.9 V
6 = 3.9 V
7 = 3.8 V
8 = 3.5 V
9 = 3.8 V
10 = 3.7 V
11 = N.C.
12 = 7.6 V
13 = 6.0 V
14 = 3.8 V
15 = 3.8 V
16 = 3.7 V
17 = 3.7 V
18 = 3.8 V
19 = 7.6 V
20 = 6.0 V
21 = 3.9 V
22 = N.C.
23 = 3.7 V
24 = 3.8 V
25 = 3.5 V
26 = 3.9 V
27 = 3.9 V
28 = 3.9 V
29 = 3.9 V
30 = 3.9 V
31 = 7.6 V
32 = 4.9 V

7355 SAA6579T

1 = N.C.
2 = 3.1 V
3 = 2.5 V
4 = 2.5 V
5 = 4.9 V
6 = GND
7 = 2.3 V
8 = 2.5 V
9 = GND
10 = GND
11 = GND
12 = 4.9 V
13 = 4.332 MHz
14 = 4.332 MHz
15 = N.C.
16 = 3.5 V

7356 TL074

1 = 4.2 V
2 = 4.2 V
3 = 4.1 V
4 = 8.2 V
5 = 4.1 V
6 = 4.3 V
7 = 4.2 V
8 = 4.2 V
9 = 4.3 V
10 = 4.1 V
11 = GND
12 = 4.2 V
13 = 4.2 V
14 = 4.2 V

7601 ST24C16

1 = 5.0 V
2 = 5.0 V
3 = 5.0 V
4 = GND
5 = 5.0 V SDA
6 = 5.0 V SCL
7 = GND
8 = 5.0 V

7602 HEF4521

1 = N.C.
2 = GND
3 = 0.0 V
4 = 4.194 MHz
5 = 4.194 MHz
6 = 4.194 MHz
7 = N.C.
8 = GND
9 = GND
10 = N.C.
11 = N.C.
12 = N.C.
13 = N.C.
14 = 1 Hz ⎍
15 = N.C.
16 = 5.0 V

7603 MSM6307GS

1 = 5.0 V
2 = 5.0 V
3 = 5.0 V
4 = N.C.
5 = 5.0 V
6 = 5.0 V
7 = 5.0 V
8 = 5.0 V
9 = 5.0 V
10 = 5.0 V
11 = 5.0 V
12 = 5.0 V
13 = N.C.
14 = 4.9 V SDA
15 = 4.9 V SCL
16 = GND
17 = 5.0 V
18 = N.C.
19 = 2.3 V
20 = 2.3 V
21 = 5.0 V
22 = N.C.
23 = 5.0 V
24 = 5.75 MHz
25 = 5.75 MHz
26 = 4.8 V
27 = 5.0 V
28 = N.C.
29 = 5.0 V
30 = 5.0 V
31 = 5.0 V
32 = 5.0 V

7800 TDA3602

1 = 13.4 V
2 = 8.5 V
3 = N.C.
4 = 0.6 V
5 = 5.0 V
6 = GND
7 = 5.0 V
8 = 13.2 V
9 = 5.0 V

7862 HEF 4044BT

1 = 0.0 V
2 = N.C.
3 = 3.5 V
4 = 0.0 V
5 = 5.0 V
6 = 4.0 V
7 = 5.0 V
8 =GND
9 = 5.0 V
10 = 0.0 V
11 = 4.8 V
12 = 5.0 V
13 = 5.0 V
14 = 5.0 V
15 = 4.0 V
16 = 5.0 V

Check and Alignment

No alignment is needed for radio part. IC96 tuner is pre-aligned.

For all measurement, please refer to "General Check & Alignment procedures for Car Systems' 4822 725 25456, unless otherwise stated

Dolby alignment:

cassette	adjust	
MTT 150 F = 400 Hz/ 200 nWb	3260 and 3261	AC voltage at pin 1 & 24 of 7251 = 387.5 mV +/- 50mV

Checks:

Supply voltages (set Off)

SET OFF	Voltage	Current + Acc ON	Current + Acc OFF	Pin 14 µP	Pin 69 µP
Acc supply	+14.4V	< 3mA		min 4.8V max 5.2V	max 0.8V
Perm supply	+14.4V	< 3mA	< 3mA		

Supply voltages (set On)

device	µP	µP	µP	TDA3602	TDA3602	EEprom
pin	30 (reset)	14 (supply)	69 (hold)	9 (5V)	2 (8.5V)	8
Voltage	max 0.8V	min 4.8V max 5.2V	min 2.0V max 5.7V	min 4.8V max 5.2V	min 8.2V max 8.8V	min 4.8V max 5.2V

Reference oscillator frequencies

device	MSM 6307	µP	SAA6579T
pin	24 & 25	51 & 52	13 & 14
frequency	5.75 MHz 0.5%	11.5 MHz 0.5%	4.332 MHz 60 ppm

FM mute:

98 MHz 1mV	output at load resistor R & L = 775 mV = REF
no signal	output should be < -20 dB (REF - 20 dB)

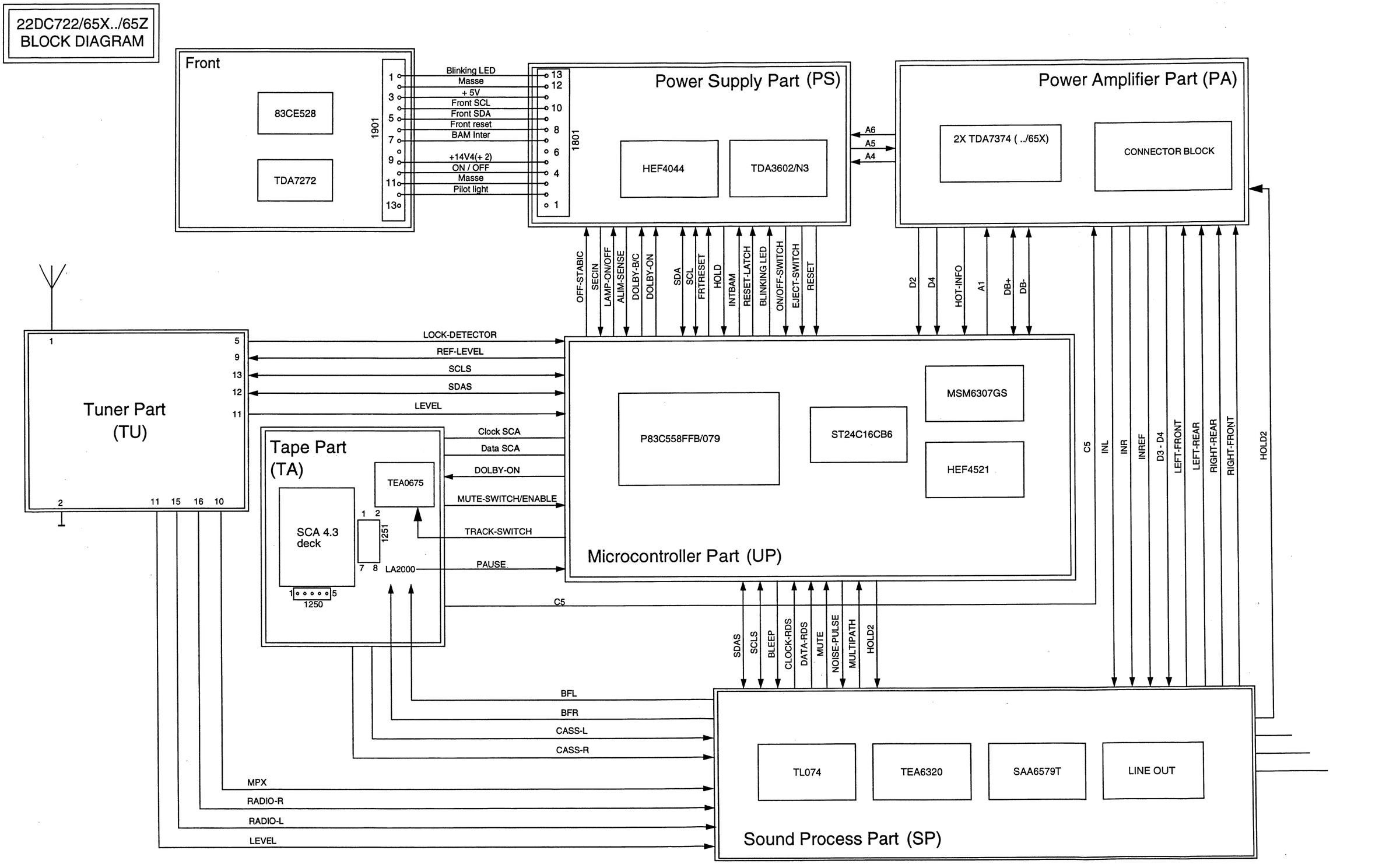
Demodulated FM levels

Input	Output of IC91 (pin 16 & 17)
98 MHz	300 mV ± 50 mV

Limiting point α-3dB

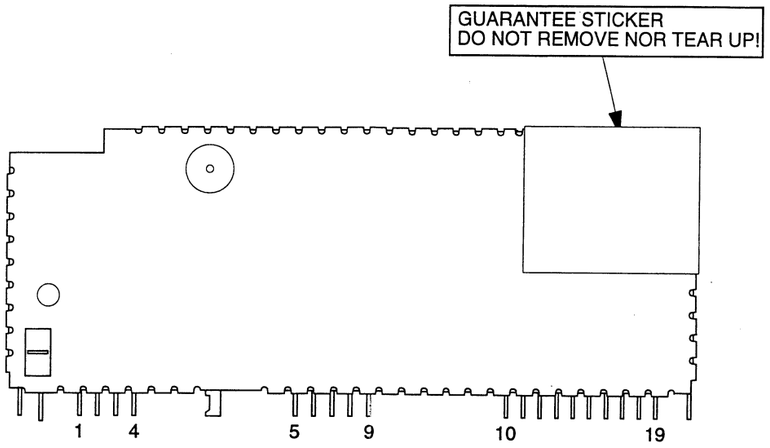
Range	Input	min	nominal	max
87.5 to 108 MHz	1mV 400Hz	3µV	5.5µV	14µV

22DC722/65X../65Z BLOCK DIAGRAM



IC96 MODULE

Not reparable module. Do not open and do not try to repair yourself!



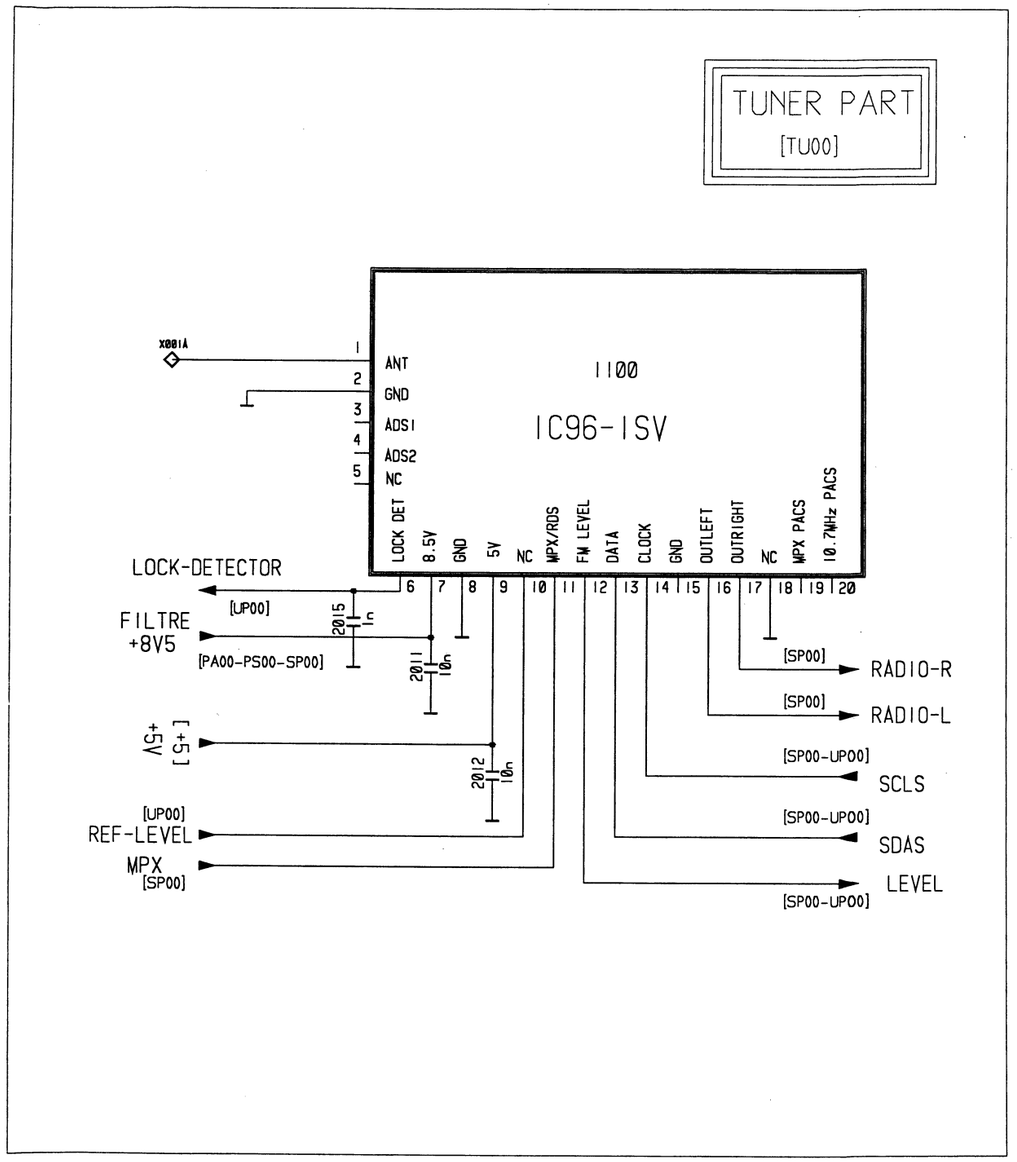
Connections

1	AM/FM Aerial input	10	Multiplex / RDS output signal
2	Ground	11	Unweighted level output
		12	I^2C SDA
5	Inlock detector pin	13	I^2C SCL
6	Vcc 8.5V	14	SDS time constant pin
7	Ground	17	Ground
8	Vcc 5.0V	19	AM audio output
9	V reference		

Quick reference data:

1) AM part
- -Longwave/Mediumwave 144-1710 KHz (inclusive USA)
- -Shortwave 5850-6250 KHz - 49 meter band
- -AM double super concept
- -AM IF1 10.7MHz
- -AM IF2 450KHz
- -First VCO frequency above input signal frequency
- -Second X-tal oscillator frenquency below IF1
- -Usable sensivity α26dB MW = 14µV typ.

1) FM part
- -FM 87.5 - 108MHz
- -FM double super concept
- -FM IF1 72.2MHz
- -FM IF2 10.7MHz
- -First VCO frequency above input signal frequency
- -Second X-tal oscillator frequency below IF1
- -Usable sensivity α26dB =2.5µV typ.
- -THD 1mV δf=75KHz = 0.5% typ
- -Signal to noise ratio = 65dB typ
- -Locktime synthetizer <2mSec



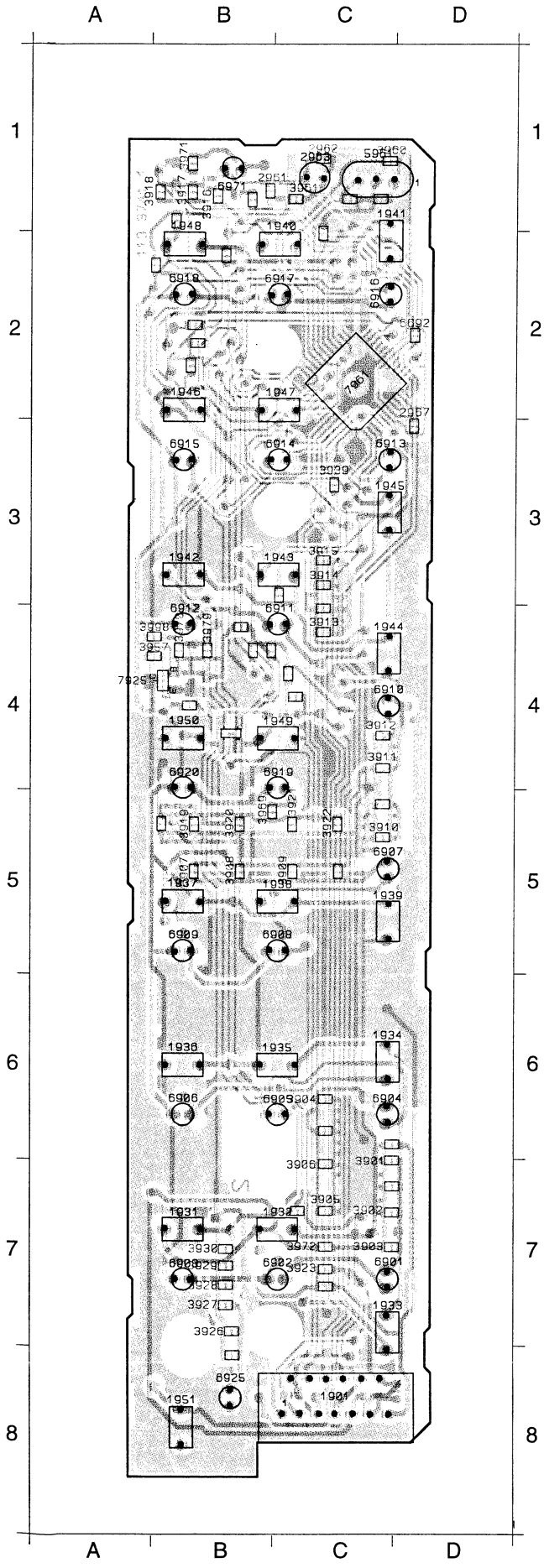
Technician's remarks

If you have some remarks or requests about this manual, please send them directly to:

Daniel GIRIN
Customer support Service
Technical documentation
BP65 - 1, rue de Clairefontaine
78512 RAMBOUILLET CEDEX

Tel: (1) 34 83 70 00 Ext 7421
FAX: (1) 34 83 71 77

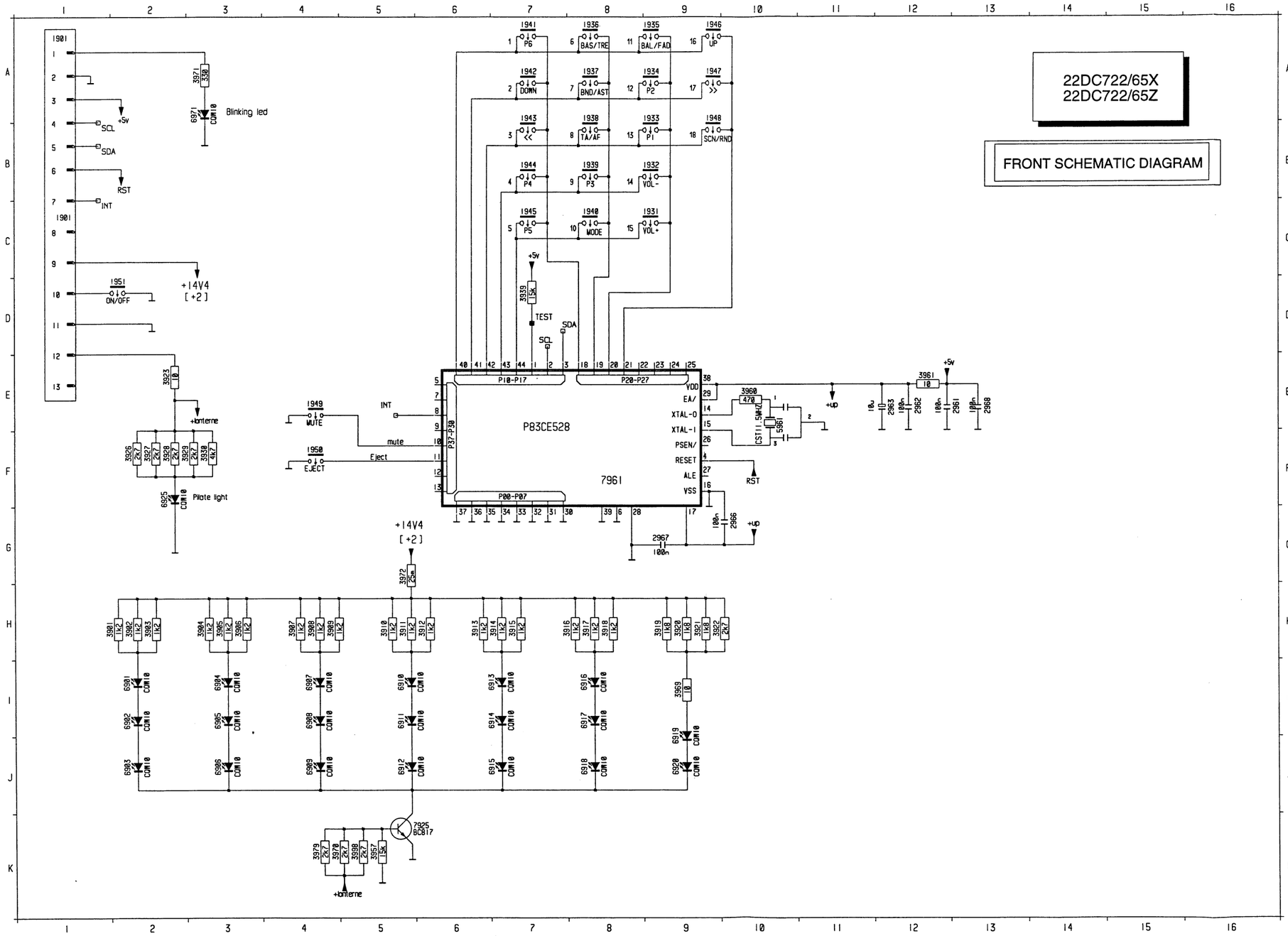
FRONT PWB LAYOUT



1901	C8	2961	B1
1931	B7	2962	C1
1932	C7	2967	D3
1933	C7	3901	C7
1934	C6	3902	C7
1935	C6	3903	C7
1936	B6	3904	C6
1937	B5	3905	C7
1938	C5	3906	C7
1939	C5	3907	B5
1940	C2	3908	B5
1941	C2	3909	C5
1942	B3	3910	C5
1943	C3	3911	C4
1944	C4	3912	C4
1945	C3	3913	C4
1946	B2	3914	C3
1947	C2	3915	C3
1948	B2	3916	B1
1949	C4	3917	B1
1950	B4	3918	B1
1951	B8	3919	B5
2963	C1	3920	B5
5961	C1	3921	C5
6901	C7	3922	C5
6902	C7	3923	C7
6903	B7	3926	B7
6904	C6	3927	B7
6905	C6	3928	B7
6906	B6	3929	B7
6907	C5	3930	B7
6908	C5	3939	C3
6909	B5	3957	B4
6910	C4	3960	C1
6911	C4	3961	C1
6912	B4	3969	C5
6913	C3	3970	B4
6914	C3	3971	B1
6915	B3	3972	C7
6916	C2	3979	B4
6917	C2	3998	B4
6918	B2	6692	D2
6919	C4	7925	B4
6920	B4	7961	C2
6925	B8		
6971	B1		

22DC722/65X
22DC722/65Z

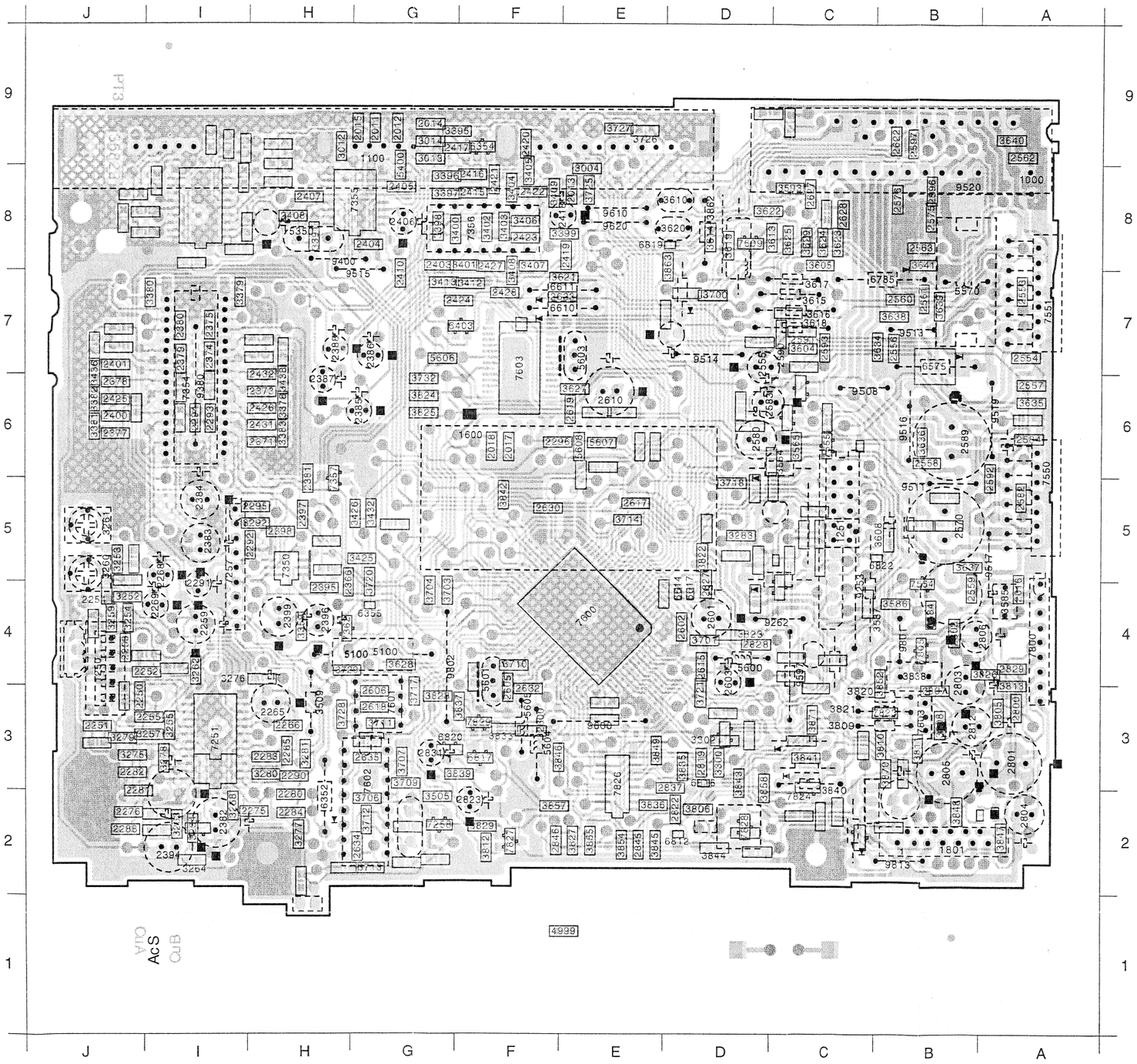
FRONT SCHEMATIC DIAGRAM



	1901	A 1	6903	J 2
	1901	C 1	6904	I 3
	1931	C 9	6905	I 3
	1932	B 9	6906	J 3
A	1933	A 9	6907	I 4
	1934	A 9	6908	I 4
	1935	A 9	6909	J 4
	1936	A 8	6910	I 5
	1937	A 8	6911	I 5
	1938	A 8	6912	J 5
	1939	B 8	6913	I 7
B	1940	C 8	6914	I 7
	1941	A 7	6915	J 7
	1942	A 7	6916	I 8
	1943	A 7	6917	I 8
	1944	B 7	6918	J 8
	1945	C 7	6919	I 9
C	1946	A 9	6920	J 9
	1947	A 9	6925	F 2
	1948	A 9	6971	A 3
	1949	E 4	7925	K 5
	1950	F 4	7961	F 8
	1951	D 2		
D	2961	E13		
	2962	E12		
	2963	E12		
	2966	G10		
	2967	G 9		
	2968	E13		
E	3901	H 2		
	3902	H 2		
	3903	H 2		
	3904	H 3		
	3905	H 3		
	3906	H 3		
F	3907	H 4		
	3908	H 4		
	3909	H 4		
	3910	H 5		
	3911	H 5		
	3912	H 6		
G	3913	H 6		
	3914	H 7		
	3915	H 7		
	3916	H 8		
	3917	H 8		
	3918	H 8		
H	3919	H 9		
	3920	H 9		
	3921	H 9		
	3922	H 9		
	3923	E 2		
	3926	F 2		
I	3927	F 2		
	3928	F 2		
	3929	F 3		
	3930	F 3		
	3939	D 7		
	3957	K 5		
J	3960	EI0		
	3961	EI2		
	3969	I 9		
	3970	K 4		
	3971	A 3		
	3972	G 5		
	3979	K 4		
K	3998	K 5		
	5961	FI0		
	6901	I 2		
	6902	I 2		

1000	A 8	2265	H 3	2385	G 5	2406	G 7	2601	D 3	2806	B 3	3585	A 4	3809	B 2
1100	G 8	2268	I 4	2386	G 6	2418	E 7	2603	D 3	2812	B 2	3610	D 7	3820	B 3
1250	J 3	2269	I 4	2387	H 6	2555	D 6	2610	E 6	2823	F 2	3615	C 7	3821	B 3
1251	C 4	2291	I 4	2388	H 6	2570	B 4	2801	A 2	2831	G 2	3616	C 6	3838	B 3
1600	F 5	2382	I 2	2394	I 1	2580	D 5	2803	B 3	3260	J 4	3617	C 7	3840	C 2
1801	B 1	2383	I 4	2396	H 3	2583	D 6	2804	A 2	3261	J 4	3618	C 6	3862	D 7
2259	I 3	2384	I 5	2399	H 3	2589	B 5	2805	B 2	3509	H 3	3620	D 7	5100	G 3

5350	H 7	6352	H 2	7550	A 5	9262	C 3	9515	G 7	9610	E 7				
5570	B 7	6610	E 6	7551	A 7	9380	I 6	9516	B 5	9620	E 7				
5600	D 3	6611	E 7	7601	G 3	9400	H 7	9517	A 4	9801	B 3				
5601	F 3	6785	B 7	7602	G 2	9508	C 6	9519	A 5	9802	G 3				
5603	E 6	7257	I 4	7800	A 3	9511	B 5	9520	B 8	9813	B 1				
5604	F 2	7354	I 6	7803	B 3	9513	B 6	9597	C 3						
5605	F 2	7356	F 7	9253	C 4	9514	D 6	9600	E 2						



12

2011	G 8	2576	B 8	3403	F 7	3826	A 3								
2012	G 8	2582	A 5	3404	F 8	3827	E 1								
2013	E 8	2584	A 5	3405	F 8	3828	G 3								
2014	G 8	2590	C 6	3406	F 7	3829	F 1								
2015	G 8	2591	C 6	3407	F 7	3833	F 2								
2016	A 4	2592	A 5	3408	F 7	3835	D 2								
2017	F 5	2593	C 6	3409	F 8	3836	E 2								
2018	F 5	2596	B 8	3412	F 7	3837	F 3								
2250	J 3	2597	B 8	3413	G 7	3839	F 2								
2251	J 2	2600	F 2	3425	G 4	3841	C 2								
2252	I 3	2602	D 3	3426	G 4	3842	F 5								
2253	J 3	2605	F 3	3432	G 4	3843	D 2								
2254	J 4	2606	G 3	3436	J 6	3844	D 1								
2255	I 3	2615	D 3	3438	H 6	3845	E 1								
2266	H 2	2617	E 5	3505	G 2	3846	E 2								
2275	H 2	2618	G 3	3564	C 5	3847	A 1								
2276	J 2	2619	E 5	3565	C 5	3848	B 2								
2280	H 2	2622	B 8	3584	B 4	3849	E 2								
2281	J 2	2623	E 7	3586	B 4	3852	B 3								
2282	J 2	2627	C 8	3587	C 4	3854	E 1								
2283	H 2	2628	C 7	3593	C 8	3855	E 1								
2284	H 2	2630	F 5	3604	C 6	3857	F 2								
2285	H 2	2632	F 3	3605	C 7	3858	D 2								
2288	J 1	2634	G 1	3608	B 4	3863	D 7								
2290	H 2	2635	G 2	3613	C 7	3870	B 2								
2292	H 4	2800	A 3	3614	D 7	3871	C 3								
2293	I 5	2802	B 3	3619	D 7	4999	E 1								
2294	I 5	2819	D 2	3621	E 7	5400	G 8								
2295	H 5	2822	D 2	3622	D 7	5606	G 6								
2296	F 5	2827	D 4	3623	C 7	5607	E 5								
2366	H 4	2828	D 3	3624	C 7	5608	E 5								
2371	H 5	2829	A 3	3625	C 7	6354	F 8								
2373	H 6	2837	D 2	3627	E 6	6355	G 4								
2374	I 6	2845	E 1	3628	G 3	6403	F 6								
2375	I 6	2846	F 1	3629	C 7	6575	B 6								
2377	J 5	3004	E 8	3634	B 6	6614	D 4								
2378	J 6	3012	H 8	3635	A 6	6617	D 4								
2379	I 6	3013	G 8	3636	B 5	6812	D 1								
2380	I 6	3014	G 8	3637	B 4	6816	D 2								
2381	H 5	3252	J 4	3638	B 6	6817	F 2								
2395	H 4	3253	J 4	3639	B 6	6819	D 7								
2397	H 4	3254	J 3	3640	A 8	6820	G 2								
2398	H 4	3255	I 2	3641	B 7	6822	B 4								
2400	J 5	3257	I 2	3700	D 7	7251	I 2								
2401	J 6	3258	I 2	3701	D 3	7258	G 1								
2403	G 7	3259	J 3	3703	G 4	7350	H 4								
2404	G 7	3262	I 3	3704	G 4	7355	G 7								
2405	G 8	3263	I 1	3706	G 2	7357	H 5								
2407	H 8	3264	I 1	3707	G 2	7362	H 3								
2408	H 7	3275	J 2	3709	G 2	7554	B 4								
2410	G 7	3276	H 3	3710	F 3	7555	C 5								
2415	F 8	3277	H 1	3711	G 2	7600	E 3								
2416	F 8	3278	I 2	3712	G 2	7603	F 6								
2417	F 8	3279	J 2	3713	G 1	7609	D 7								
2419	E 7	3280	H 2	3714	E 4	7805	B 3								
2420	F 8	3281	H 2	3717	G 3	7823	B 3								
2421	F 8	3283	D 4	3718	D 5	7824	C 2								
2422	F 8	3292	H 4	3720	G 4	7826	E 2								
2423	F 7	3294	I 1	3721	D 3	7827	F 1								
2424	F 7	3300	D 2	3725	E 8	7828	D 1								
2425	J 6	3302	D 2	3726	E 8	7829	F 2								
2426	H 5	3359	H 3	3727	E 8										
2427	F 7	3378	H 6	3728	H 3										
2428	F 7	3379	I 7	3729	H 3										
2431	H 5	3380	I 7	3732	G 6										
2432	H 6	3381	J 5	3805	A 3										
2553	A 7	3382	J 6	3806	D 2										
2554	A 6	3383	H 5	3807	B 3										
2556	B 6	3391	H 7	3808	B 2										
2557	A 6	3395	F 8	3810	B 2										
2558	B 5	3396	G 8	3811	B 2										
2559	B 4	3397	G 8	3812	F 1										
2560	B 7	3398	G 7	3813	A 3										
2561	B 7	3399	E 7	3822	D 4										
2562	A 8	3400	G 7	3823	D 3										
2563	B 7	3401	F 7	3824	G 6										
2575	B 7	3402	F 7	3825	G 5										

12a

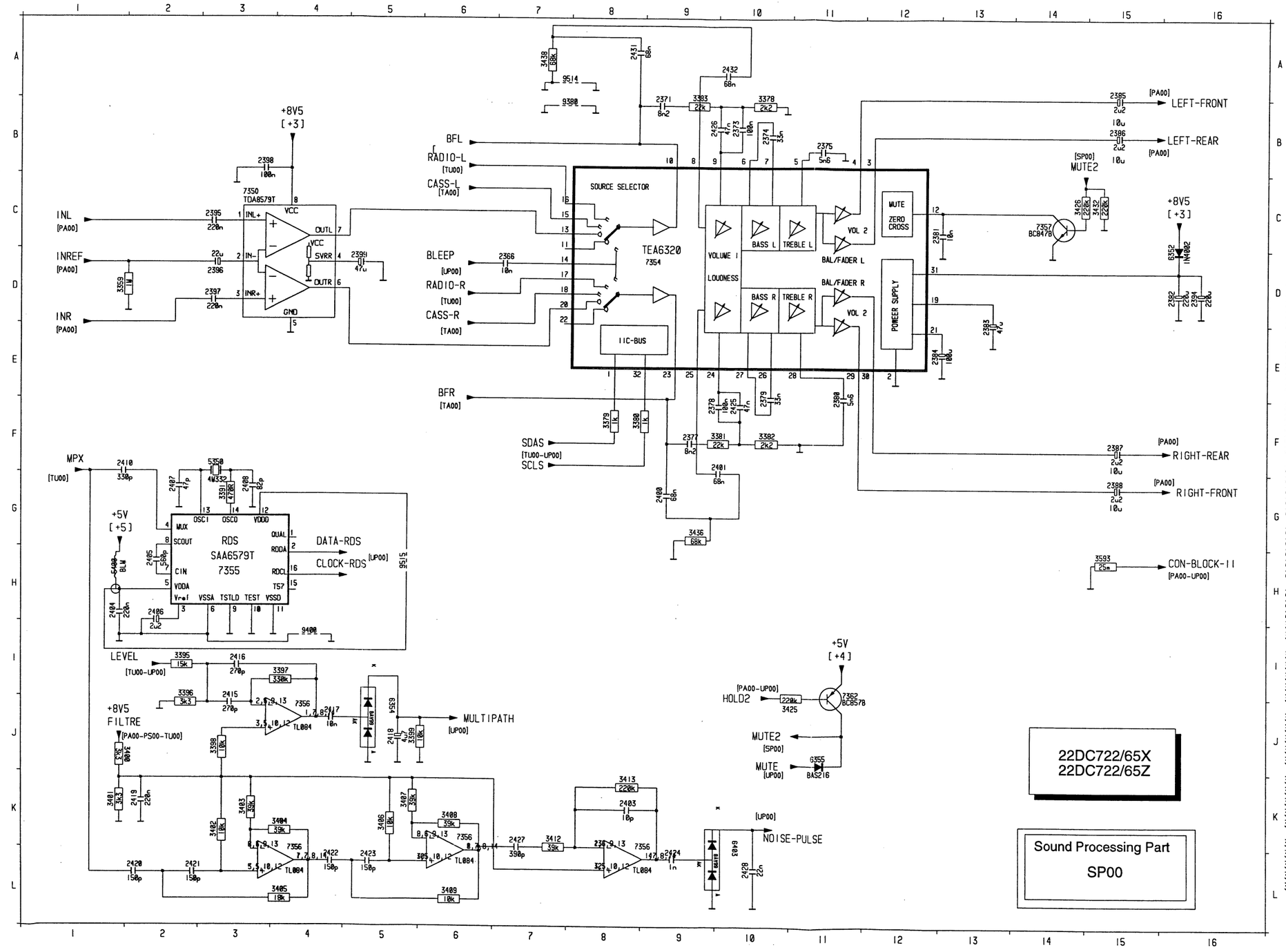
A1 ..... H1	CON-BLOCK-23 ..... J1	DB+ J17	HOLD C7/D9	LEVEL B12	NOISE-PULSE D10	REMOTE 1 ..... J3/D11	SCLS H10/K11
ALIM-SENSE A11	CON-BLOCK-24 ..... K1	DB- K17	HOLD2 ..... B8	LOCK-DETECTOR H16	OFF-STABIC H9	REMOTE 2 ..... L3/D12	SDA K7
BLEEP H9	CON-BLOCK-25 ..... J5	DOLBY-B/C H10	HOT-INFO I12	MT/CR H9	ON/OFF-SWITCH H8	RESET F16	SDAS H7/K11
BLINKING-LED H8	CON-BLOCK-27 ..... K3	DOLBY-ON H10	ILL-RHEOSTAT D12	MULTIPATH D12	PAUSE D7	RESET-LATCH H8	SECIN A11
CLK-SCA D8	DAT-SCA D8	EJECT-SWITCH H7	INT_D2B D9/J11	MUTE H11	PLAY-SWITCH D9	SCL K7	TELEPHONE-MUTE H11/H3
CLOCK-RDS H9	DATA-RDS H10	FRTRESET H8/K8	LAMPE-ON/OFF D10	MUTE-SWITCH/ENABLE ... D10	REF-LEVEL A11	SCL-EXT J9	TRACK-SWITCH D9

22DC722/65X
22DC722/65Z

Microprocessor Part
UP00

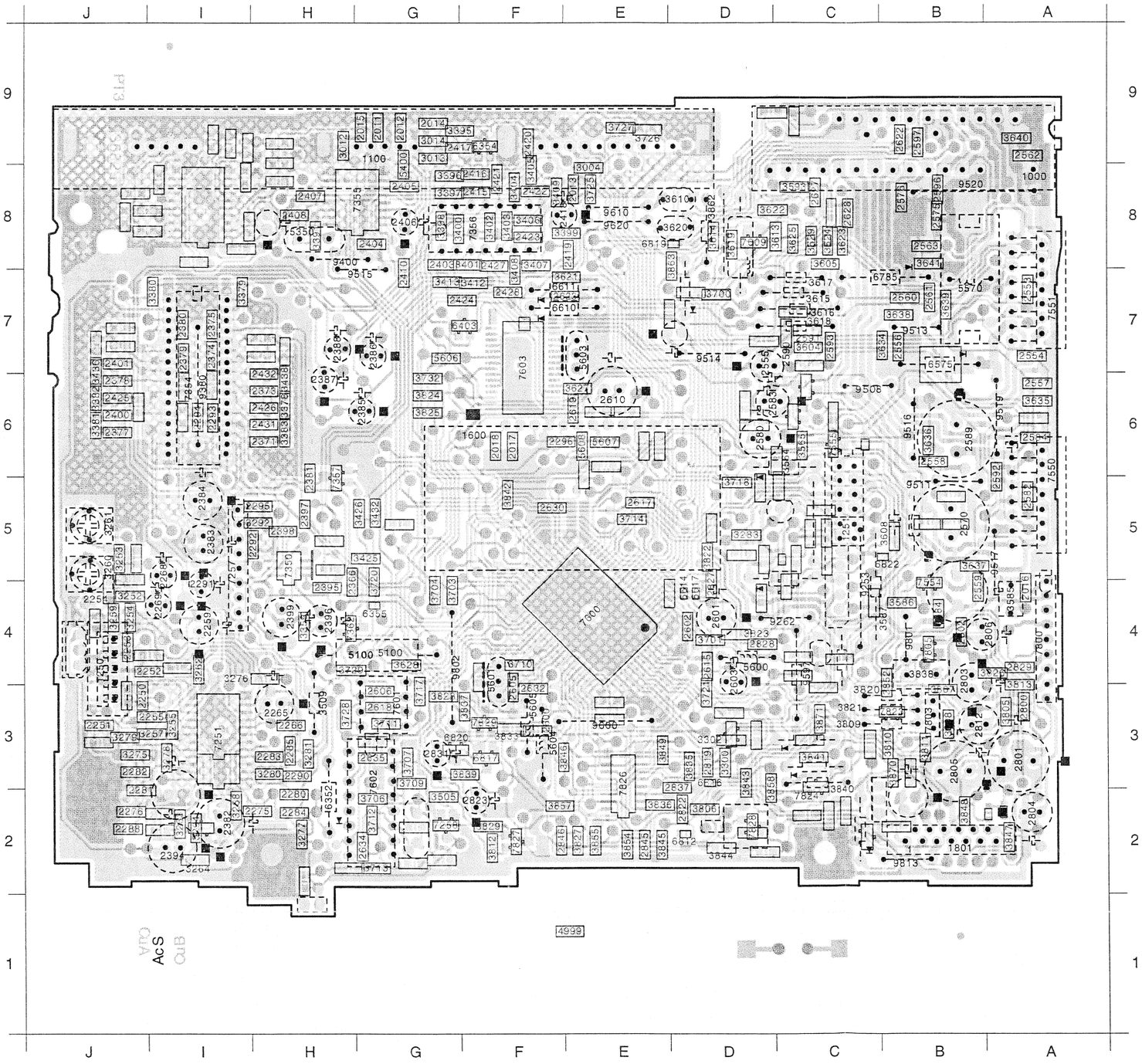
1600 J 6	5603 J13		
2013 C13	5604 D 6		
2014 C11	5605 E 6		
A 2296 L 5	5606 L16		
2597 K 1	5607 L 7		
2600 F 2	5608 K 5		
2601 F 1	6610 K16		
2602 G15	6611 L16		
2603 H15	6614 B10		
2605 G 5	6617 B10		
B 2606 B 1	6819 H 1		
2610 L 6	7600 F10		
2615 F 2	7601 B 1		
2617 F 3	7602 C16		
2618 B14	7603 L13		
C 2619 L15	7609 H 2		
2622 H 1	9600 D 6		
2623 J11	9610 J16		
2627 K 3	9620 K16		
2628 L 3			
2630 H13			
D 2632 E 6			
2634 D17			
2635 C15			
3004 C12			
3012 H13			
3013 B11			
E 3014 B11			
3610 J17			
3613 H 2			
3614 H 2			
3619 G 1			
3620 K17			
F 3621 K15			
3622 J 2			
3623 K 2			
3624 J 1			
3625 J 1			
3627 J13			
3628 H 9			
G 3629 J 1			
3700 G 2			
3701 G15			
3703 A 5			
3704 A 5			
H 3706 B15			
3707 D15			
3709 C17			
3710 G 6			
3711 B15			
3712 D16			
I 3713 B17			
3714 F15			
3717 A 3			
3718 B 9			
3720 C 8			
J 3721 B10			
3725 C12			
3726 A 4			
3727 A 4			
3728 C 3			
3729 A 4			
3732 J11			
K 3824 H 7			
3825 I11			
3828 J10			
3842 E15			
3846 H 8			
5600 E 1			
5601 G 5			
L			

BFL	B6	CON-BLOCK	H16	INREF	D1	MUTE	J11	RIGHT-REAR	F15
BFR	E6	DATA-RDS	H4	LEFT-FRONT	A16	MUTE2	J11/C14	SCLS	F7
BLEEP	D6	FILTRE	J1	LEFT-REAR	B16	NOISE-PULSE	K10	SDAS	F7
CASS-L	C6	HOLD2	I10	LEVEL	I2	RADIO-L	B6		
CASS-R	D6	INL	C1	MPX	F1	RADIO-R	D6		
CLOCK-RDS	H4	INR	D1	MULTIPATH	J6	RIGHT-FRONT	G16		



	2366	D 7	3409	L 6		2418	J 5	3379	F 8
	2371	B 9	3412	K 7		2419	K 2	I 3380	F 8
	2373	B10	3413	K 8		2420	L 2	3381	F10
A	2374	B10	3425	J11		2421	L 2	3382	F10
	2375	B11	3426	C14		2422	L 4	3383	B 9
	2377	F 9	3432	C15	G	2423	L 5	3391	G 3
	2378	F 9	3436	G 9		2424	L 9	3395	I 2
	2379	E10	3438	A 7		2425	F10	3396	J 2
	2380	E11	3593	H15		2426	B 9	J 3397	I 4
B	2381	C12	5350	F 3		2427	K 7	3398	J 3
	2382	D16	5400	H 1	H	2428	L10		
	2383	D13	6352	C16		2431	A 8	3399	J 5
	2384	E12	6354	J 5		2432	A10	3400	J 2
	2385	A15	6355	J11		3359	D 1	3401	K 1
	2386	B15	6403	K10		3378	B10	K 3402	K 3
C	2387	F15	7350	C 3	I	3379	F 8	3403	K 3
	2388	G15	7354	D 9		3380	F 8		
	2394	D16	7355	H 3		3381	F10	3404	K 4
	2395	C 3	7356	J 4		3382	F10	3405	L 4
	2396	D 3	7356	L 4		3383	B 9	3406	K 5
	2397	D 3	7356	K 6		3391	G 3	3407	K 5
D	2398	B 3	7356	L 8		3395	I 2	3408	K 6
	2399	D 5	7357	C14	J	3396	J 2	L	
	2400	G 9	7362	I11		3397	I 4		
	2401	F10	9380	B 7		3398	J 3		
	2403	K 8	9400	I 4		3399	J 5		
	2404	H 1	9514	A 7		3400	J 2		
E	2405	H 2	9515	H 5	K	3401	K 1		
	2406	H 2				3402	K 3		
	2407	G 2				3403	K 3		
	2408	G 3				3404	K 4		
	2410	F 1				3405	L 4		
	2415	J 3				3406	K 5		
F	2416	I 3				3407	K 5		
	2417	J 4				3408	K 6		

1000 A 8	2265 H 3	2385 G 5	2406 G 7	2601 D 3	2806 B 3	3585 A 4	3809 B 2	5350 H 7	6352 H 2	7550 A 5	9262 C 3	9515 G 7	9610 E 7
1100 G 8	2268 I 4	2386 G 6	2418 E 7	2603 D 3	2812 B 2	3610 D 7	3820 B 3	5570 B 7	6610 E 6	7551 A 7	9380 I 6	9516 B 5	9620 E 7
1250 J 3	2269 I 4	2387 H 6	2555 D 6	2610 E 6	2823 F 2	3615 C 7	3821 B 3	5600 D 3	6611 E 7	7601 G 3	9400 H 7	9517 A 4	9801 B 3
1251 C 4	2291 I 4	2388 H 6	2570 B 4	2801 A 2	2831 G 2	3616 C 6	3838 B 3	5601 F 3	6785 B 7	7602 G 2	9508 C 6	9519 A 5	9802 G 3
1600 F 5	2382 I 2	2394 I 1	2580 D 5	2803 B 3	3260 J 4	3617 C 7	3840 C 2	5603 E 6	7257 I 4	7800 A 3	9511 B 5	9520 B 8	9813 B 1
1801 B 1	2383 I 4	2396 H 3	2583 D 6	2804 A 2	3261 J 4	3618 C 6	3862 D 7	5604 F 2	7354 I 6	7803 B 3	9513 B 6	9597 C 3	
2259 I 3	2384 I 5	2399 H 3	2589 B 5	2805 B 2	3509 H 3	3620 D 7	5100 G 3	5605 F 2	7356 F 7	9253 C 4	9514 D 6	9600 E 2	

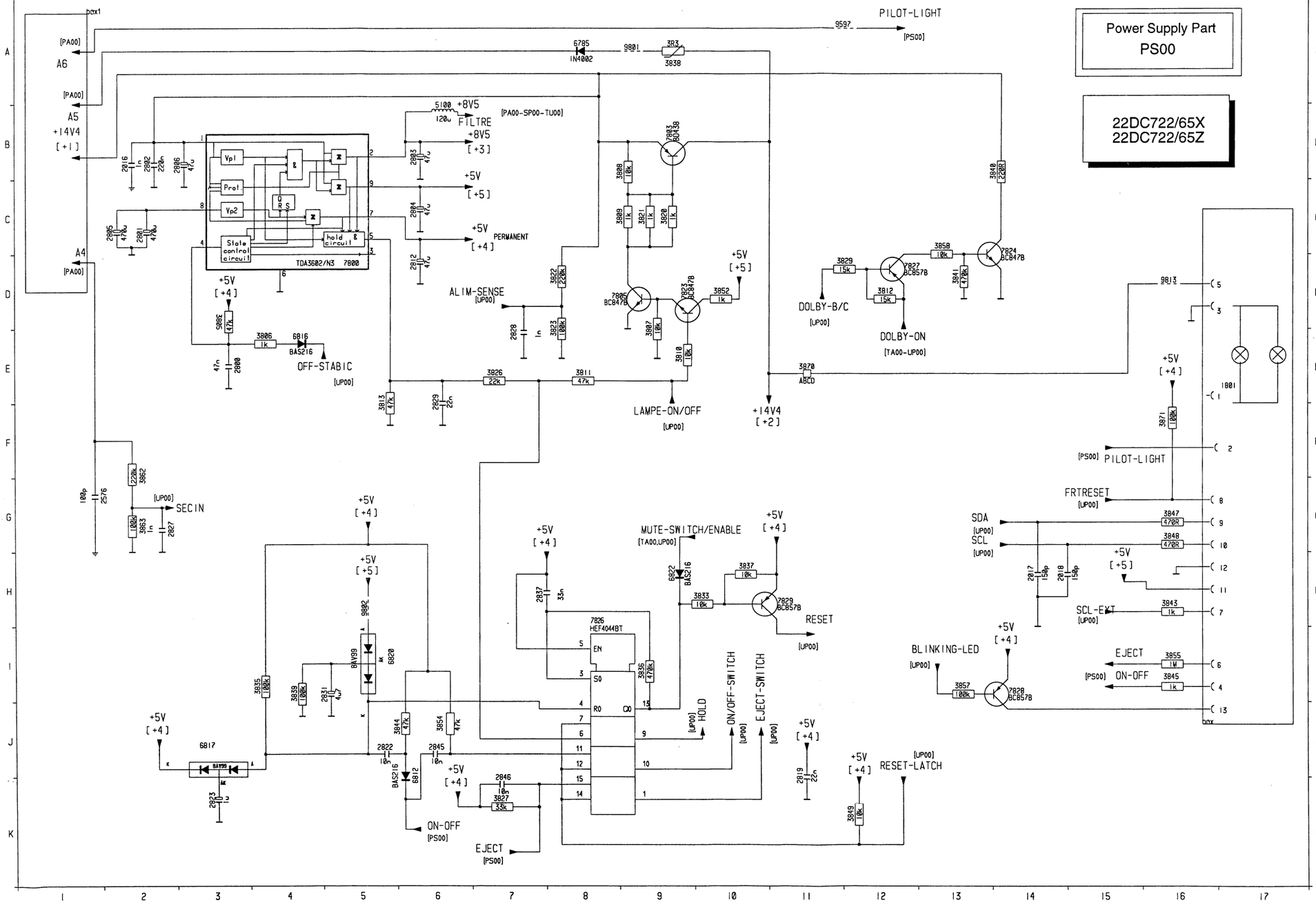


15

2011 G 8	2576 B 8	3403 F 7	3826 A 3
2012 G 8	2582 A 5	3404 F 8	3827 E 1
2013 E 8	2584 A 5	3405 F 8	3828 G 3
2014 G 8	2590 C 6	3406 F 7	3829 F 1
2015 G 8	2591 C 6	3407 F 7	3833 F 2
2016 A 4	2592 A 5	3408 F 7	3835 D 2
2017 F 5	2593 C 6	3409 F 8	3836 E 2
2018 F 5	2596 B 8	3412 F 7	3837 F 3
2250 J 3	2597 B 8	3413 G 7	3839 F 2
2251 J 2	2600 F 2	3425 G 4	3841 C 2
2252 I 3	2602 D 3	3426 G 4	3842 F 5
2253 J 3	2605 F 3	3432 G 4	3843 D 2
2254 J 4	2606 G 3	3436 J 6	3844 D 1
2255 I 3	2615 D 3	3438 H 6	3845 E 1
2266 H 2	2617 E 5	3505 G 2	3846 E 2
2275 H 2	2618 G 3	3564 C 5	3847 A 1
2276 J 2	2619 E 5	3565 C 5	3848 B 2
2280 H 2	2622 B 8	3584 B 4	3849 E 2
2281 J 2	2623 E 7	3586 B 4	3852 B 3
2282 J 2	2627 C 8	3587 C 4	3854 E 1
2283 H 2	2628 C 7	3593 C 8	3855 E 1
2284 H 2	2630 F 5	3604 C 6	3857 F 2
2285 H 2	2632 F 3	3605 C 7	3858 D 2
2288 J 1	2634 G 1	3608 B 4	3863 D 7
2290 H 2	2635 G 2	3613 C 7	3870 B 2
2292 H 4	2800 A 3	3614 D 7	3871 C 3
2293 I 5	2802 B 3	3619 D 7	4999 E 1
2294 I 5	2819 D 2	3621 E 7	5400 G 8
2295 H 5	2822 D 2	3622 D 7	5606 G 6
2296 F 5	2827 D 4	3623 C 7	5607 E 5
2366 H 4	2828 D 3	3624 C 7	5608 E 5
2371 H 5	2829 A 3	3625 C 7	6354 F 8
2373 H 6	2837 D 2	3627 E 6	6355 G 4
2374 I 6	2845 E 1	3628 G 3	6403 F 6
2375 I 6	2846 F 1	3629 C 7	6575 B 6
2377 J 5	3004 E 8	3634 B 6	6614 D 4
2378 J 6	3012 H 8	3635 A 6	6617 D 4
2379 I 6	3013 G 8	3636 B 5	6812 D 1
2380 I 6	3014 G 8	3637 B 4	6816 D 2
2381 H 5	3252 J 4	3638 B 6	6817 F 2
2395 H 4	3253 J 4	3639 B 6	6819 D 7
2397 H 4	3254 J 3	3640 A 8	6820 G 2
2398 H 4	3255 I 2	3641 B 7	6822 B 4
2400 J 5	3257 I 2	3700 D 7	7251 I 2
2401 J 6	3258 I 2	3701 D 3	7258 G 1
2403 G 7	3259 J 3	3703 G 4	7350 H 4
2404 G 7	3262 I 3	3704 G 4	7355 G 7
2405 G 8	3263 I 1	3706 G 2	7357 H 5
2407 H 8	3264 I 1	3707 G 2	7362 H 3
2408 H 7	3275 J 2	3709 G 2	7554 B 4
2410 G 7	3276 H 3	3710 F 3	7555 C 5
2415 F 8	3277 H 1	3711 G 2	7600 E 3
2416 F 8	3278 I 2	3712 G 2	7603 F 6
2417 F 8	3279 J 2	3713 G 1	7609 D 7
2419 E 7	3280 H 2	3714 E 4	7805 B 3
2420 F 8	3281 H 2	3717 G 3	7823 B 3
2421 F 8	3283 D 4	3718 D 5	7824 C 2
2422 F 8	3292 H 4	3720 G 4	7826 E 2
2423 F 7	3294 I 1	3721 D 3	7827 F 1
2424 F 7	3300 D 2	3725 E 8	7828 D 1
2425 J 6	3302 D 2	3726 E 8	7829 F 2
2426 H 5	3359 H 3	3727 E 8	
2427 F 7	3378 H 6	3728 H 3	
2428 F 7	3379 I 7	3729 H 3	
2431 H 5	3380 I 7	3732 G 6	
2432 H 6	3381 J 5	3805 A 3	
2553 A 7	3382 J 6	3806 D 2	
2554 A 6	3383 H 5	3807 B 3	
2556 B 6	3391 H 7	3808 B 2	
2557 A 6	3395 F 8	3810 B 2	
2558 B 5	3396 G 8	3811 B 2	
2559 B 4	3397 G 8	3812 F 1	
2560 B 7	3398 G 7	3813 A 3	
2561 B 7	3399 E 7	3822 D 4	
2562 A 8	3400 G 7	3823 D 3	
2563 B 7	3401 F 7	3824 G 6	
2575 B 7	3402 F 7	3825 G 5	

15a

A6	A1	DOLBY-ON	E12	MUTE-SWITCH/ENABLE	G9	RESET-LATCH	K12
A5	B1	EJECT	K7/I16	OFF-STABIC	E5	SCL	G14
A4	D1	EJECT-SWITCH	J10	ON/OFF	K6/I16	SCL-EXT	H15
ALIM-SENSE	D7	FRTRESET	G15	ON/OFF-SWITCH	J10	SDA	G14
BLINKING-LED	I13	HOLD	J10	PILOT-LIGHT	A12/F15	SECIN	G2
DOLBY-B/C	D11	LAMPE-ON/OFF	E9	RESET	I11		

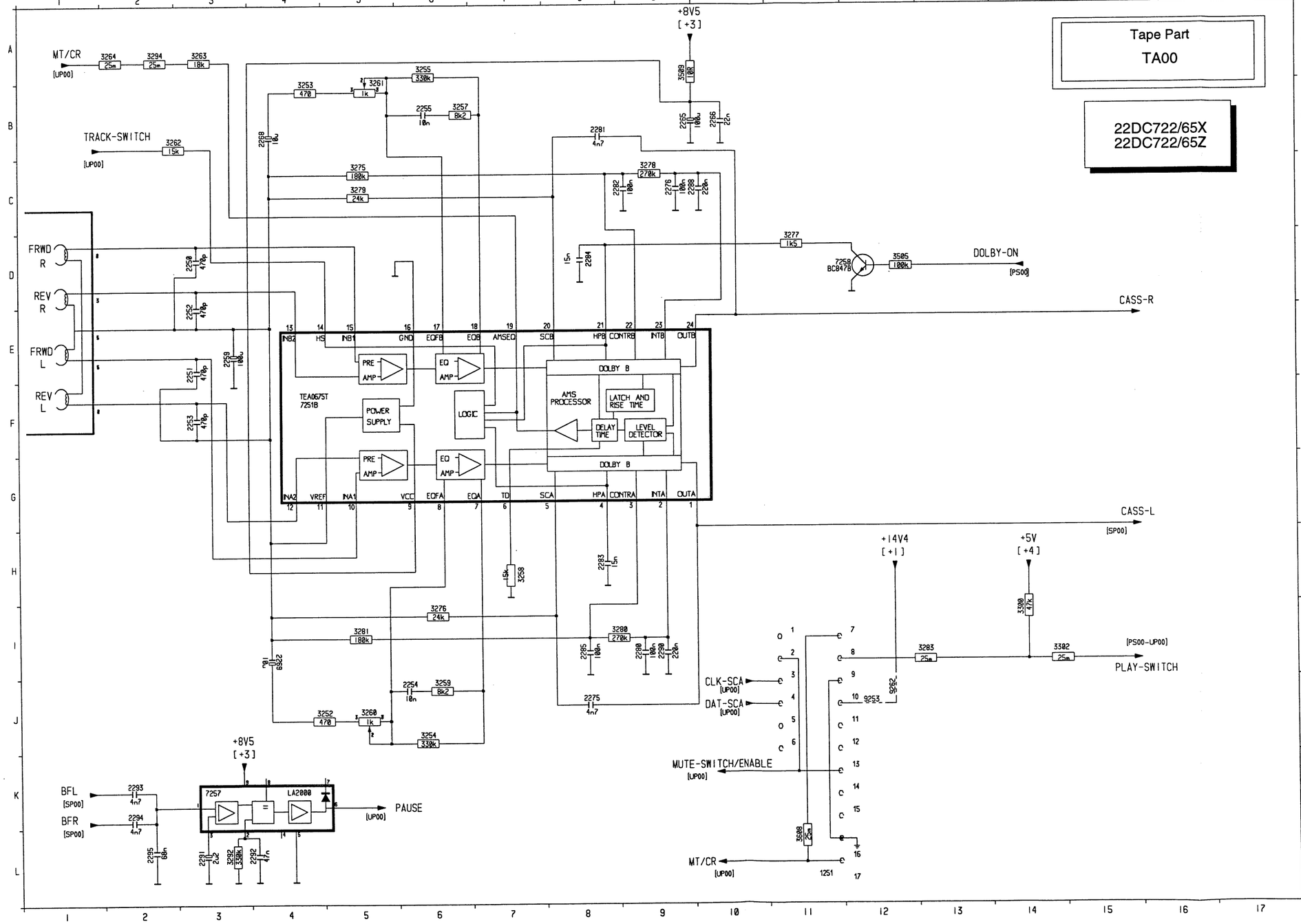


	1801	E17	7803	B 9		3822	D 8
	1801	D16	7805	D 9		3823	D 8
	2016	B 2	7823	D 9		3826	E 7
	2017	H14	7824	C14		3827	K 7
A	2018	H14	7826	H 8		3829	D12
	2576	G 1	7827	D12		3833	H10
	2800	E 3	7828	I14	G	3835	I 4
	2801	C 2	7829	H11		3836	I 9
	2802	B 2	9597	A11		3837	H10
	2803	B 6	9801	A 9		3838	A 9
	2804	C 6	9802	H 5		3839	I 4
B	2805	C 2	9813	D16		3840	B14
	2806	B 3			H	3841	D13
	2812	D 6				3843	H16
	2819	J11				3844	J 6
	2822	J 5				3845	I16
	2823	K 3				3847	G16
C	2827	G 2				3848	G16
	2828	E 7			I	3849	K12
	2829	E 6				3852	D10
	2831	I 5				3854	J 6
	2837	H 7				3855	I16
	2845	J 6				3857	I13
D	2846	K 7				3858	C13
	3805	D 3				3862	F 2
	3806	E 4			J	3863	G 2
	3807	D 9				3870	E11
	3808	B 9				3871	F16
	3809	C 9				5100	B 6
E	3810	E 9				6785	A 8
	3811	E 8				6812	J 6
	3812	D12			K	6816	E 4
	3813	E 5				6817	J 3
	3820	C 9				6820	I 5
	3821	C 9				6822	H 9
F	3822	D 8				7800	D 5

BFL.....K2
BFR.....K2
CASS-L.....G16
CASS-R.....E16
CLK-SCA.....J11
DAT-SCA.....J11
DOLBY-ON.....D14
FRWD-L.....E1
FRWD-R.....D1
MT-CR.....A1/L11
MUTE-SWITCH/ENABLE...K11
PAUSE.....K5
PLAY-SWITCH.....I15
REV-L.....F1
REV-R.....D1
TRACK-SWITCH.....B2

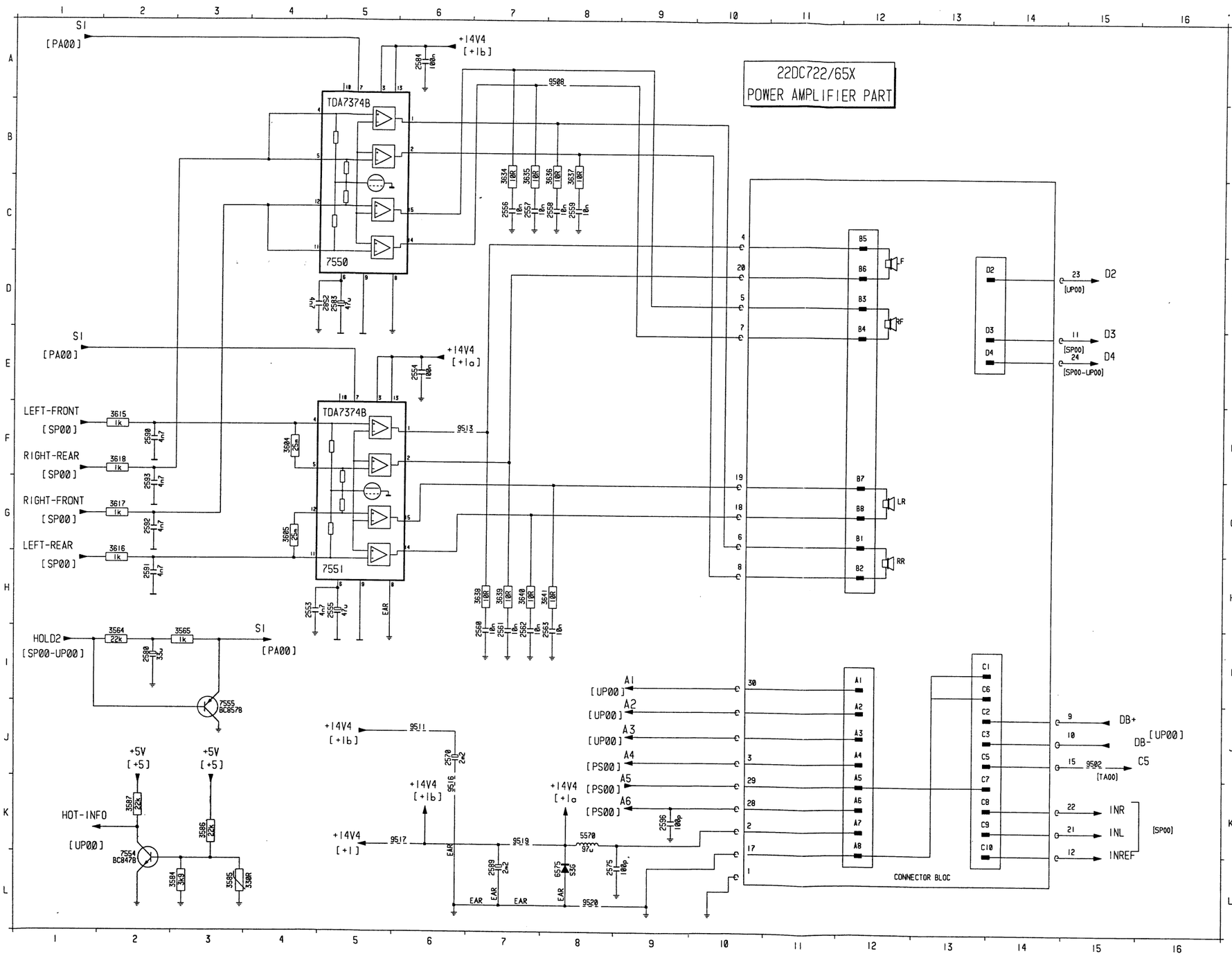
Tape Part
TA00

22DC722/65X
22DC722/65Z



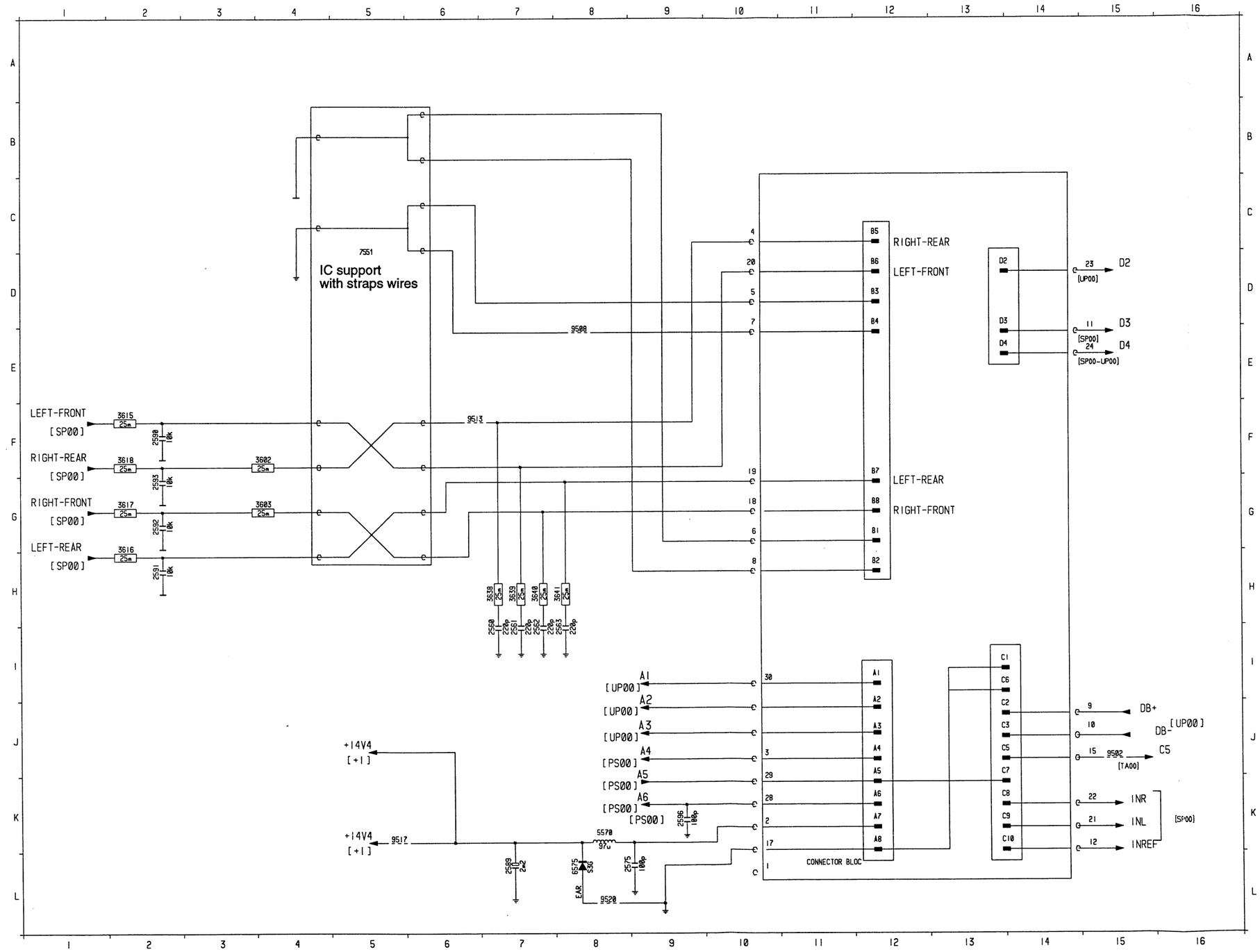
1251 L11
2250 D 3
2251 E 3
2252 E 3
2253 F 3
2254 J 6
2255 B 6
2259 E 3
2265 B 9
2266 B10
2268 B 4
2269 I 4
2275 J 8
2276 C 9
2280 I 9
2281 B 8
2282 C 9
2283 H 8
2284 D 8
2285 I 8
2288 C10
2290 I 9
2291 L 3
2292 L 4
2293 K 2
2294 K 2
2295 L 2
3252 J 5
3253 B 4
3254 J 6
3255 A 6
3257 B 6
3258 H 7
3259 J 6
3260 J 5
3261 B 5
3262 B 3
3263 A 3
3264 A 2
3275 C 5
3276 I 6
3277 D11
3278 C 9
3279 C 5
3280 I 9
3281 I 5
3283 I13
3292 L 3
3294 A 2
3300 I14
3302 I14
3505 D12
3509 A 9
3608 L11
7251 F 4
7257 K 3
7258 D12
9253 J12
9262 J12

22DC722/65X
POWER AMPLIFIER PART



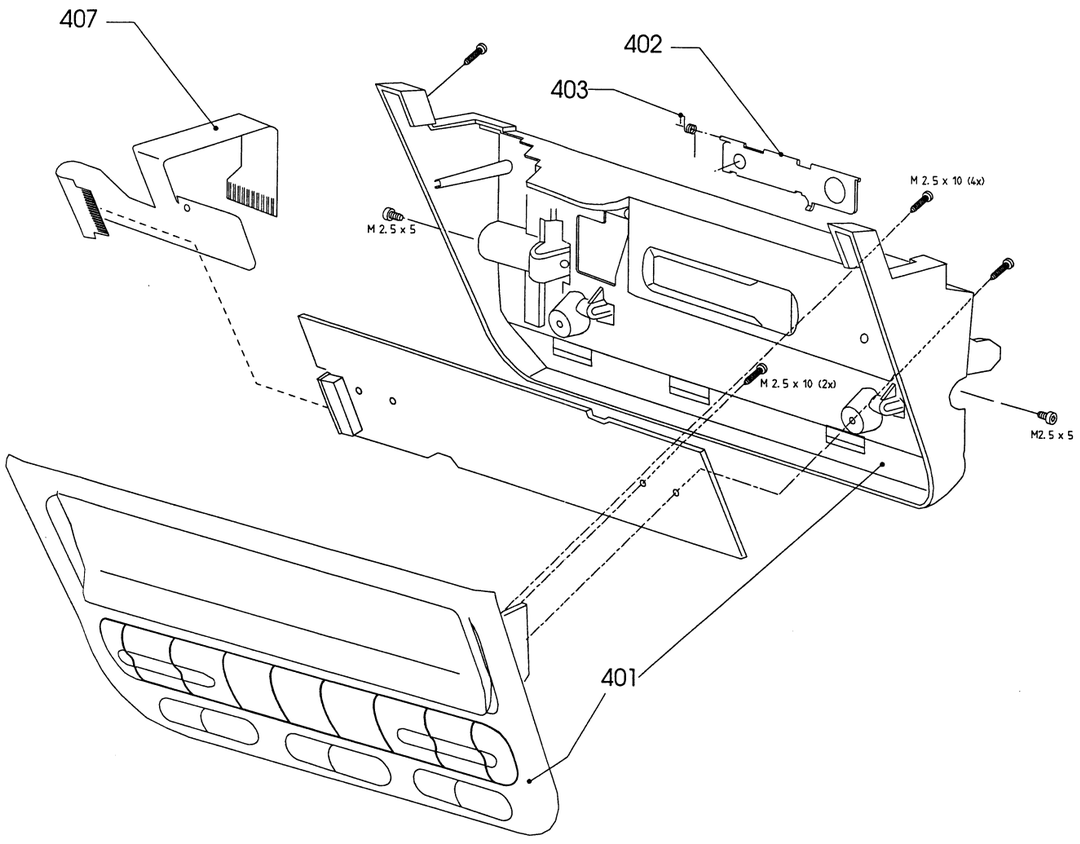
	1000	I 10
	2553	H 4
	2554	E 6
A	2555	H 5
	2556	C 7
	2557	C 7
	2558	C 8
	2559	C 8
	2560	I 7
B	2561	I 7
	2562	I 7
	2563	I 8
	2570	J 6
	2575	L 8
	2580	I 2
C	2582	D 5
	2583	D 5
	2584	A 6
	2589	L 7
	2590	F 2
	2591	H 2
D	2592	G 2
	2593	G 2
	2596	K 9
	3564	I 2
	3565	I 3
	3584	L 3
E	3585	L 3
	3586	K 3
	3587	K 2
	3604	F 4
	3605	G 4
	3615	F 2
F	3616	H 2
	3617	G 2
	3618	F 2
	3634	B 7
	3635	B 7
	3636	B 8
G	3637	B 8
	3638	H 7
	3639	H 7
	3640	H 7
	3641	H 8
	5570	K 8
	6575	L 8
H	7550	D 5
	7551	H 5
	7554	L 2
	7555	J 3
	9508	A 8
	9511	J 6
I	9513	F 6
	9516	K 6
	9517	K 6
	9519	K 7
	9520	L 8

22DC722/65Z
POWER AMPLIFIER PART

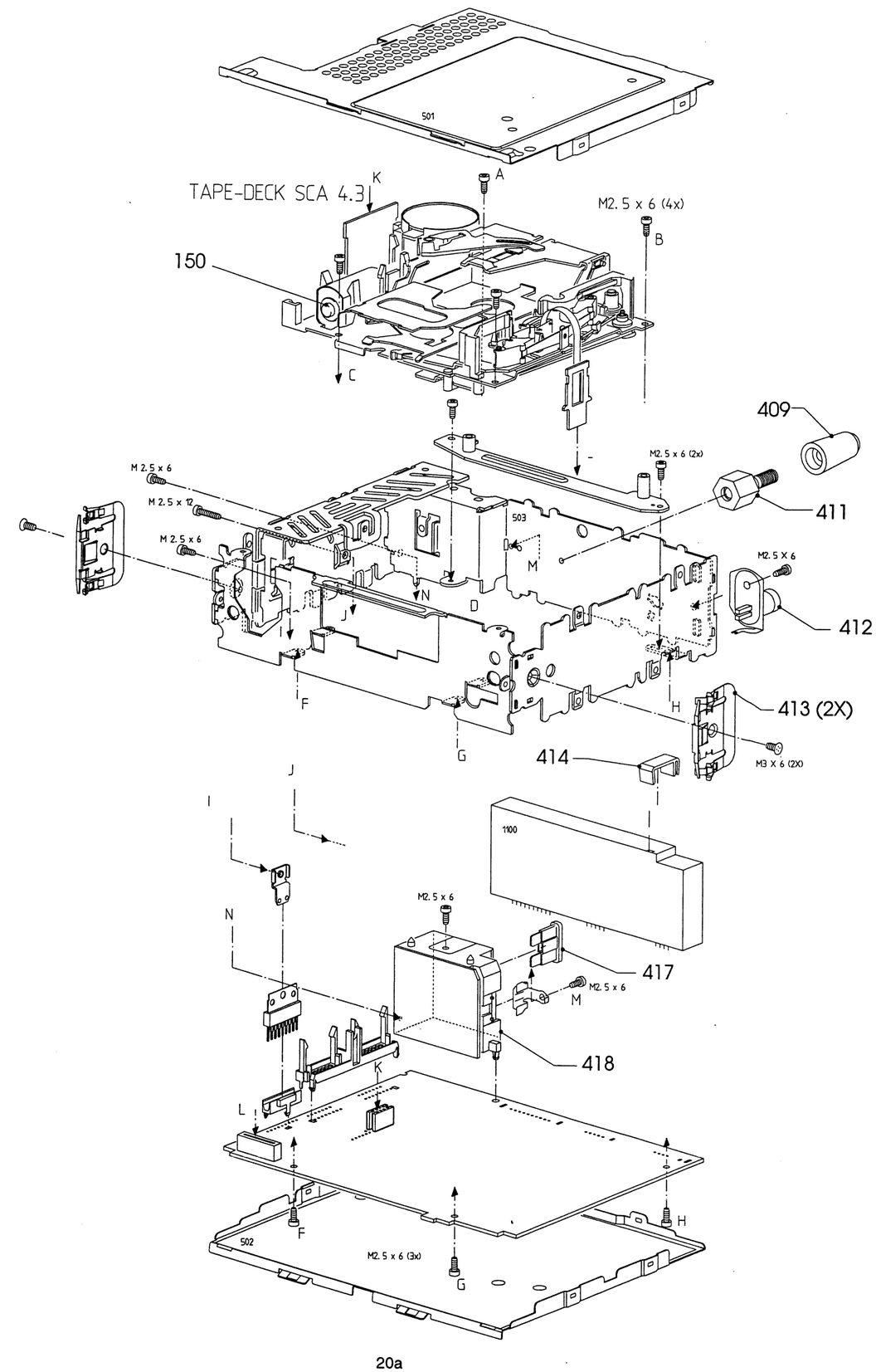


A	1000	I10
	2560	I 7
	2561	I 7
	2562	I 7
	2563	I 8
B	2575	L 8
	2589	L 7
	2590	F 2
	2591	H 2
	2592	G 2
	2593	G 2
	2596	K 9
	3602	F 4
	3603	G 4
	3615	F 2
C	3616	G 2
	3617	G 2
	3618	F 2
	3638	H 7
	3639	H 7
D	3640	H 7
	3641	H 8
	5570	K 8
	6575	L 8
	7551	D 5
E	9508	E 8
	9513	F 6
	9517	K 5
	9520	L 8

22DC722/65X
22DC722/65Z



MECHANICAL PARTSLIST		
401	4822 459 05115	ORNAMENTAL PLATE (ASSY)
402	4822 443 64411	FLAP CASSETTE PRINTED
403	4822 492 42231	SPRING FLAP
407	4822 466 10683	FOIL FLEX
409	4822 532 12177	SPACER
411	4822 462 72087	SPACER METAL
412	4822 267 31702	AERIAL BUSH
413	4822 492 71523	MOUNTING SPRING
414	4822 404 21276	IC96 HOOK
417	4822 071 21003	FUSE 10A
418	4822 290 61227	CONNECTOR BLOCK
150	4822 691 10605	TAPE DECK SCA4.3/H



Miscellaneous

1000	4822 290 61227	CONNECTOR BLOCK
1100	4822 214 12085	TUNER IC96 1SV
1600	4822 214 52251	THICK FILM BAM
1931	4822 276 13103	SKQCACD010
1932	4822 276 13103	SKQCACD010
1933	4822 276 13103	SKQCACD010
1934	4822 276 13103	SKQCACD010
1935	4822 276 13103	SKQCACD010
1936	4822 276 13103	SKQCACD010
1937	4822 276 13103	SKQCACD010
1938	4822 276 13103	SKQCACD010
1939	4822 276 13103	SKQCACD010
1940	4822 276 13103	SKQCACD010
1941	4822 276 13103	SKQCACD010
1942	4822 276 13103	SKQCACD010
1943	4822 276 13103	SKQCACD010
1944	4822 276 13103	SKQCACD010
1945	4822 276 13103	SKQCACD010
1946	4822 276 13103	SKQCACD010
1947	4822 276 13103	SKQCACD010
1948	4822 276 13103	SKQCACD010
1949	4822 276 13103	SKQCACD010
1950	4822 276 13103	SKQCACD010
1951	4822 276 13103	SKQCACD010

2011	5322 122 34098	10nF 10%X7R 63V
2012	5322 122 34098	10nF 10%X7R 63V
2013	5322 126 10223	10nF 10%X7R 63V
2014	5322 126 10223	4,7nF 10%X7R 63V
2015	5322 122 34123	1nF 10%X7R 50V
2016	5322 122 34123	1nF 10%X7R 50V
2017	5322 122 33538	150pF 2%NP0 63V
2018	5322 122 33538	150pF 2%NP0 63V
2250	5322 122 32268	470pF 10% 50V
2251	5322 122 32268	470pF 10% 50V
2252	5322 122 32268	470pF 10% 50V
2253	5322 122 32268	470pF 10% 50V
2254	5322 122 34098	10nF 10%X7R 63V
2255	5322 122 34098	10nF 10%X7R 63V
2259	4822 124 80453	100µF 20% 10V
2265	4822 124 80453	100µF 20% 10V
2266	5322 122 32654	22nF 10%X7R 63V
2268	4822 124 41017	10µF 16V
2269	4822 124 41017	10µF 16V
2275	5322 126 10223	4,7nF 10%X7R 63V
2276	4822 126 13196	100nF 10% 0805 X7R 25V
2280	4822 126 13196	100nF 10% 0805 X7R 25V
2281	5322 126 10223	4,7nF 10%X7R 63V
2282	4822 126 13196	100nF 10% 0805 X7R 25V
2283	4822 126 13188	15nF 5% X7R 63V
2284	4822 126 13188	15nF 5% X7R 63V
2285	4822 126 13196	100nF 10% 0805 X7R 25V
2288	4822 126 13057	220nF 10% X7R 25V
2290	4822 126 13057	220nF 10% X7R 25V
2291	4822 124 23504	2.2µF 20% 50V
2292	4822 126 13343	47nF 10% X7R 25V
2293	5322 126 10223	4,7nF 10%X7R 63V
2294	5322 126 10223	4,7nF 10%X7R 63V
2295	4822 126 13392	68nF 10% 0805 X7R 25V

2296	4822 126 13196	100nF 10% 0805 X7R 25V
2366	5322 122 34098	10nF 10%X7R 63V
2371	4822 126 10525	8,2nF 10%X7R 63V
2373	4822 126 13196	100nF 10% 0805 X7R 25V
2374	4822 126 12105	33nF 5%X7R 63V
2375	4822 122 32646	5,6nF 10%X7R 50V
2377	4822 126 10525	8,2nF 10%X7R 63V
2378	4822 126 13196	100nF 10% 0805 X7R 25V
2379	4822 126 12105	33nF 5%X7R 63V
2380	4822 122 32646	5,6nF 10%X7R 50V
2381	5322 122 34098	10nF 10%X7R 63V
2382	4822 124 23582	220µF 10V
2383	4822 124 22646	47µF 20% 16V
2384	4822 124 80453	100µF 20% 10V
2385	4822 124 23504	2.2µF 20% 50V
2385	4822 124 41017	10µF 16V
2386	4822 124 23504	2.2µF 20% 50V
2386	4822 124 41017	10µF 16V
2387	4822 124 23504	2.2µF 20% 50V
2387	4822 124 41017	10µF 16V
2388	4822 124 23504	2.2µF 20% 50V
2388	4822 124 41017	10µF 16V
2394	4822 124 23582	220µF 10V
2395	4822 126 13057	220nF 10% X7R 25V
2396	4822 124 23279	22µF 20% 16V
2397	4822 126 13057	220nF 10% X7R 25V
2398	4822 126 13196	100nF 10% 0805 X7R 25V
2399	4822 124 22646	47µF 20% 16V
2400	4822 126 13392	68nF 10% 0805 X7R 25V
2401	4822 126 13392	68nF 10% 0805 X7R 25V
2403	5322 122 32448	10pF 5% 50V
2404	4822 126 13057	220nF 10% X7R 25V
2405	5322 116 80853	560pF 5%NP0 63V
2406	4822 124 23504	2.2µF 20% 50V
2407	4822 126 13692	47pF 1% NP0 63V
2408	4822 126 13695	82pF 1% NP0 63V
2410	5322 122 31863	330pF 5%NP0 50V
2415	4822 122 33216	270pF 5%NP0 50V
2417	5322 122 34098	10nF 10%X7R 63V
2418	4822 124 80765	4.7µF 20% 35V
2419	4822 126 13057	220nF 10% X7R 25V
2420	5322 122 33538	150pF 2%NP0 63V
2421	5322 122 33538	150pF 2%NP0 63V
2422	5322 122 33538	150pF 2%NP0 63V
2423	5322 122 33538	150pF 2%NP0 63V
2424	5322 122 34123	1nF 10%X7R 50V
2425	4822 126 13343	47nF 10% X7R 25V
2426	4822 126 13343	47nF 10% X7R 25V
2427	4822 122 33172	390pF 5% NP0 50V
2428	5322 122 32654	22nF 10%X7R 63V
2431	4822 126 13392	68nF 10% 0805 X7R 25V
2432	4822 126 13392	68nF 10% 0805 X7R 25V
2553	5322 126 10223	4,7nF 10%X7R 63V
2554	4822 122 33496	100nF 10%X7R 63V
2555	4822 124 40433	4,7 µF 6V3 20 %
2556	4822 126 13196	100nF 10% 0805 X7R 25V
2557	4822 126 13196	100nF 10% 0805 X7R 25V
2558	4822 126 13196	100 nF 10 % 0805 X7R 25V
2559	4822 126 13196	100 nF 10 % 0805 X7R 25V
2560	4822 122 33575	220pF 5%NPO 50V

2560	4822 126 13196	100 nF 10 % 0805 X7R 25V
2561	4822 122 33575	220pF 5%NPO 50V
2561	4822 126 13196	100nF 10% 0805 X7R 25V
2562	4822 122 33575	220pF 5%NPO 50V
2562	4822 126 13196	100nF 10% 0805 X7R 25V
2563	4822 122 33575	220pF 5%NPO 50V
2563	4822 126 13196	100nF 10% 0805 X7R 25V
2570	4822 124 80863	2200 µF 20 % 16V
2575	5322 122 32531	100pF 5%NP0 50V
2576	5322 122 32531	100pF 5%NP0 50V
2580	4822 124 23281	33µF 20% 16V
2582	5322 126 10223	4,7nF 10%X7R 63V
2583	4822 124 40433	4,7 µF 6V3 20 %
2584	4822 122 33496	100nF 10%X7R 63V
2589	4822 124 80863	2200µF 20% 16V
2590	5322 126 10223	4,7nF 10%X7R 63V
2591	5322 126 10223	4,7nF 10%X7R 63V
2592	5322 126 10223	4,7nF 10%X7R 63V
2593	5322 126 10223	4,7nF 10%X7R 63V
2596	5322 122 32531	100pF 5%NP0 50V
2597	4822 126 12105	33nF 5%X7R 63V
2600	5322 122 32654	22nF 10%X7R 63V
2601	4822 124 22646	47µF 20% 16V
2602	4822 126 13196	100nF 10% 0805 X7R 25V
2603	4822 124 41017	10µF 16V
2605	5322 122 32658	22pF 5% 50V
2606	4822 126 13196	100nF 10% 0805 X7R 25V
2615	4822 126 12105	33nF 5%X7R 63V
2617	4822 126 12105	33nF 5%X7R 63V
2618	5322 122 32654	22nF 10%X7R 63V
2619	4822 126 13196	100nF 10% 0805 X7R 25V
2622	5322 122 34123	1nF 10%X7R 50V
2623	4822 126 13196	100nF 10% 0805 X7R 25V
2627	5322 122 34123	1nF 10%X7R 50V
2628	5322 122 34123	1nF 10%X7R 50V
2630	5322 122 34123	1nF 10%X7R 50V
2632	5322 122 32268	470pF 10% 50V
2633	4822 126 13057	220nF 10% X7R 25V
2634	5322 122 32531	100pF 5%NP0 50V
2635	5322 126 10223	4,7nF 10%X7R 63V
2800	4822 126 13343	47nF 10% X7R 25V
2802	4822 126 13057	220nF 10% X7R 25V
2803	4822 124 22646	47µF 20% 16V
2804	4822 124 22646	47µF 20% 16V
2806	4822 124 11562	47µF 20% 35V
2812	4822 124 22646	47µF 20% 16V
2819	5322 122 32654	22nF 10%X7R 63V
2822	5322 122 34098	10nF 10%X7R 63V
2823	4822 124 23282	
2827	5322 122 34123	1nF 10%X7R 50V
2828	5322 122 34123	1nF 10%X7R 50V
2829	5322 122 32654	22nF 10%X7R 63V
2831	4822 124 80765	4.7µF 20% 35V
2837	4822 126 12105	1nF 10%X7R 50V
2845	5322 122 34098	10nF 10%X7R 63V
2846	5322 122 34098	10nF 10%X7R 63V
2961	4822 126 13196	100nF 10% 0805 X7R 25V
2962	4822 126 13196	100nF 10% 0805 X7R 25V
2963	4822 124 41017	10µF 16V
2966	4822 126 13196	100nF 10% 0805 X7R 25V

2967	4822 126 13196	100nF 10% 0805 X7R 25V
2968	4822 126 13196	100nF 10% 0805 X7R 25V

3004	4822 051 20223	22KΩ 5% 0,1W
3012	4822 051 20102	1KΩ 5% 0,1W
3013	4822 051 20273	27KΩ 5% 0,1W
3014	4822 051 20104	100KΩ 5% 0,1W
3252	4822 051 20471	470 Ω 5% 0,1W
3253	4822 051 20471	470Ω 5% 0,1W
3254	4822 051 20334	330KΩ 5% 0,1W
3255	4822 051 20334	330KΩ 5% 0,1W
3257	4822 051 20822	8K20 5% 0,1W
3258	4822 051 20153	15KΩ 5% 0,1W
3259	4822 051 20822	8K20 5% 0,1W
3260	4822 101 11187	1K 30%LIN 0,1W
3261	4822 101 11187	1K 30%LIN 0,1W
3262	4822 051 20153	15KΩ 5% 0,1W
3263	4822 117 10965	18K 1% 0,1W
3264	4822 051 20008	0Ω JUMP. (0805)
3275	4822 051 20184	180KΩ 5% 0,1W
3276	4822 117 10507	24K 1% 0.1W
3277	4822 117 11139	1K5 1% 0,1W
3278	4822 051 20274	270KΩ 5% 0,1W
3279	4822 117 10507	24K 1% 0.1W
3280	4822 051 20274	270KΩ 5% 0,1W
3281	4822 051 20184	180KΩ 5% 0,1W
3292	4822 051 20334	330KΩ 5% 0,1W
3294	4822 051 20008	0Ω JUMP. (0805)
3300	4822 117 10834	47K 1% 0,1W
3302	4822 051 20008	0Ω JUMP. (0805)
3359	4822 051 20105	1M00 5% 0,1W
3378	4822 117 11449	2K2 1% 0,1W
3379	4822 051 20102	1KΩ 5% 0,1W
3380	4822 051 20102	1KΩ 5% 0,1W
3381	4822 051 20223	22KΩ 5% 0,1W
3382	4822 117 11449	2K2 1% 0,1W
3383	4822 051 20223	22KΩ 5% 0,1W
3391	4822 051 20471	470Ω 5% 0,1W
3395	4822 051 20153	15KΩ 5% 0,1W
3396	4822 051 20332	3K30 5% 0,1W
3397	4822 051 20334	330KΩ 5% 0,1W
3398	4822 117 10833	10K 1% 0,1W
3399	4822 117 10833	10K 1% 0,1W
3400	4822 051 20332	3K30 5% 0,1W
3401	4822 051 20332	3K30 5% 0,1W
3402	4822 117 10833	10K 1% 0,1W
3403	4822 051 20393	39KΩ 5% 0,1W
3404	4822 051 20393	39KΩ 5% 0,1W
3405	4822 117 10965	18K 1% 0,1W
3406	4822 117 10833	10K 1% 0,1W
3407	4822 051 20393	39KΩ 5% 0,1W
3408	4822 051 20393	39KΩ 5% 0,1W
3409	4822 117 10833	10K 1% 0,1W
3412	4822 051 20393	39KΩ 5% 0,1W
3413	4822 051 20224	220KΩ 5% 0,1W
3416	4822 051 20008	0Ω JUMP. (0805)
3417	4822 051 20008	0Ω JUMP. (0805)
3418	4822 051 20008	0Ω JUMP. (0805)

3419	4822 051 20008	0Ω JUMP. (0805)	3703	4822 117 10833	10K 1% 0,1W
3425	4822 051 20224	220KΩ 5% 0,1W	3704	4822 117 10833	10K 1% 0,1W
3426	4822 051 20224	220KΩ 5% 0,1W	3706	4822 051 20008	0Ω JUMP. (0805)
3432	4822 051 20224	220KΩ 5% 0,1W	3707	4822 051 20008	0Ω JUMP. (0805)
3435	4822 051 20008	0Ω JUMP. (0805)	3709	4822 051 20153	15KΩ 5% 0,1W
3436	4822 051 20683	68KΩ 5% 0,1W	3710	4822 051 20471	470Ω 5% 0,1W
3437	4822 051 20008	0Ω JUMP. (0805)	3711	4822 051 20153	15KΩ 5% 0,1W
3438	4822 051 20683	68KΩ 5% 0,1W	3712	4822 051 20008	0Ω JUMP. (0805)
3505	4822 051 20104	100KΩ 5% 0,1W	3713	4822 117 10834	47K 1% 0,1W
3509	4822 116 52176	10E 5% 0,5W	3714	4822 117 10834	47K 1% 0,1W
3564	4822 051 20223	22KΩ 5% 0,1W	3717	4822 117 10833	10K 1% 0,1W
3584	4822 051 20392	3K90 5% 0,1W	3718	4822 051 20472	4K70 5% 0,1W
3585	4822 116 40254	330R	3720	4822 051 20102	1KΩ 5% 0,1W
3586	4822 051 20223	22KΩ 5% 0,1W	3721	4822 051 20153	15KΩ 5% 0,1W
3587	4822 051 20223	22KΩ 5% 0,1W	3725	4822 051 20104	100KΩ 5% 0,1W
3592	4822 051 20008	0Ω JUMP. (0805)	3726	4822 051 20101	100Ω 5% 0,1W
3593	4822 051 20008	0Ω JUMP. (0805)	3727	4822 051 20101	100Ω 5% 0,1W
3599	4822 051 20008	0Ω JUMP. (0805)	3728	4822 117 10833	10K 1% 0,1W
3601	4822 051 20008	0Ω JUMP. (0805)	3729	4822 117 10833	10K 1% 0,1W
3602	4822 051 20008	0Ω JUMP. (0805)	3730	4822 051 20153	15KΩ 5% 0,1W
3603	4822 051 20008	0Ω JUMP. (0805)	3731	4822 117 10834	47K 1% 0,1W
3604	4822 051 20008	0Ω JUMP. (0805)	3732	4822 117 10833	10K 1% 0,1W
3605	4822 051 20008	0Ω JUMP. (0805)	3805	4822 117 10834	47K 1% 0,1W
3608	4822 051 20008	0Ω JUMP. (0805)	3806	4822 051 20102	1KΩ 5% 0,1W
3609	4822 051 20008	0Ω JUMP. (0805)	3807	4822 117 10833	10K 1% 0,1W
3610	4822 116 40221	8R2 20%	3808	4822 117 10833	10K 1% 0,1W
3613	4822 051 20333	33KΩ 5% 0,1W	3809	4822 050 21002	1KΩ 1% 0,6W
3614	4822 051 20104	100KΩ 5% 0,1W	3810	4822 117 10833	10K 1% 0,1W
3615	4822 050 21002	1KΩ 1% 0,6W	3811	4822 117 10834	47K 1% 0,1W
3616	4822 050 21002	1KΩ 1% 0,6W	3812	4822 051 20153	15KΩ 5% 0,1W
3617	4822 050 21002	1KΩ 1% 0,6W	3813	4822 117 10834	47K 1% 0,1W
3618	4822 050 21002	1KΩ 1% 0,6W	3820	4822 050 21002	1KΩ 1% 0,6W
3619	4822 117 11449	2K2 1% 0,1W	3821	4822 050 21002	1KΩ 1% 0,6W
3620	4822 116 40221	8R2 20%	3822	4822 051 20224	220KΩ 5% 0,1W
3621	4822 051 20101	100Ω 5% 0,1W	3823	4822 051 20104	100KΩ 5% 0,1W
3622	4822 051 20104	100KΩ 5% 0,1W	3824	4822 117 10833	10K 1% 0,1W
3623	4822 051 20104	100KΩ 5% 0,1W	3825	4822 117 10833	10K 1% 0,1W
3624	4822 051 20331	330Ω 5% 0,1W	3826	4822 051 20223	22KΩ 5% 0,1W
3625	4822 051 20331	330Ω 5% 0,1W	3827	4822 051 20333	33KΩ 5% 0,1W
3627	4822 051 20102	1KΩ 5% 0,1W	3828	4822 117 10833	10K 1% 0,1W
3628	4822 051 20008	0Ω JUMP. (0805)	3829	4822 051 20153	15KΩ 5% 0,1W
3629	4822 051 20008	0Ω JUMP. (0805)	3833	4822 117 10833	10K 1% 0,1W
3634	4822 051 20109	10Ω 5% 0,1W	3835	4822 051 20104	100KΩ 5% 0,1W
3635	4822 051 20109	10Ω 5% 0,1W	3836	4822 051 20474	470KΩ 5% 0,1W
3636	4822 051 20109	10Ω 5% 0,1W	3837	4822 117 10833	10K 1% 0,1W
3637	4822 051 20109	10Ω 5% 0,1W	3838	4822 116 40267	3R3 25% 20V
3638	4822 051 20008	0Ω JUMP. (0805)	3839	4822 051 20104	100KΩ 5% 0,1W
3638	4822 051 20109	10Ω 5% 0,1W	3840	4822 116 83872	220R 5% 0,5W
3639	4822 051 20008	0Ω JUMP. (0805)	3841	4822 051 20474	470KΩ 5% 0,1W
3639	4822 051 20109	10Ω 5% 0,1W	3842	4822 117 10833	10K 1% 0,1W
3640	4822 051 20008	0Ω JUMP. (0805)	3843	4822 051 20102	1KΩ 5% 0,1W
3640	4822 051 20109	10Ω 5% 0,1W	3844	4822 117 10834	47K 1% 0,1W
3641	4822 051 20008	0Ω JUMP. (0805)	3845	4822 051 20102	1KΩ 5% 0,1W
3641	4822 051 20109	10Ω 5% 0,1W	3846	4822 051 20102	1KΩ 5% 0,1W
3643	4822 117 10833	10K 1% 0,1W	3847	4822 051 20471	470Ω 5% 0,1W
3644	4822 117 10833	10K 1% 0,1W	3848	4822 051 20471	470Ω 5% 0,1W
3645	4822 117 10833	10K 1% 0,1W	3849	4822 117 10833	10K 1% 0,1W
3646	4822 117 10833	10K 1% 0,1W	3852	4822 051 20102	1KΩ 5% 0,1W
3700	4822 117 10833	10K 1% 0,1W	3854	4822 117 10834	47K 1% 0,1W
3701	4822 051 20101	100Ω 5% 0,1W	3855	4822 051 20105	1M00 5% 0,1W

3857	4822 051 20104	100KΩ 5% 0,1W	6610	4822 130 32904	BZV85-C5V6
3858	4822 117 10833	10K 1% 0,1W	6611	4822 130 32904	BZV85-C5V6
3861	4822 051 20008	0Ω JUMP. (0805)	6617	4822 130 83757	BAS216
3862	4822 116 83874	220K 5% 0,5W	6785	5322 130 30684	1N4002RL
3863	4822 051 20104	100KΩ 5% 0,1W	6812	4822 130 83757	BAS216
3864	4822 051 20478	4R70 5% 0,1W	6816	4822 130 83757	BAS216
3870	4822 051 20008	0Ω JUMP. (0805)	6817	5322 130 34337	BAV99
3871	4822 051 20104	100KΩ 5% 0,1W	6818	5322 130 34331	BAV70
3901	4822 051 20122	1K20 5% 0,1W	6819	4822 130 83757	BAS216
3902	4822 051 20122	1K20 5% 0,1W	6820	5322 130 34337	BAV99
3903	4822 051 20122	1K20 5% 0,1W	6822	4822 130 83757	BAS216
3904	4822 051 20122	1K20 5% 0,1W	6901	4822 130 83856	VSL03360
3905	4822 051 20122	1K20 5% 0,1W	6902	4822 130 83856	VSL03360
3906	4822 051 20122	1K20 5% 0,1W	6903	4822 130 83856	VSL03360
3907	4822 051 20122	1K20 5% 0,1W	6904	4822 130 83856	
3908	4822 051 20122	1K20 5% 0,1W	6905	4822 130 83856	VSL03360
3909	4822 051 20122	1K20 5% 0,1W	6906	4822 130 83856	VSL03360
3910	4822 051 20122	1K20 5% 0,1W	6907	4822 130 83856	VSL03360
3911	4822 051 20122	1K20 5% 0,1W	6908	4822 130 83856	VSL03360
3912	4822 051 20122	1K20 5% 0,1W	6909	4822 130 83856	VSL03360
3913	4822 051 20122	1K20 5% 0,1W	6910	4822 130 83856	VSL03360
3914	4822 051 20122	1K20 5% 0,1W	6911	4822 130 83856	VSL03360
3915	4822 051 20122	1K20 5% 0,1W	6912	4822 130 83856	VSL03360
3916	4822 051 20122	1K20 5% 0,1W	6913	4822 130 83856	VSL03360
3917	4822 051 20122	1K20 5% 0,1W	6914	4822 130 83856	VSL03360
3918	4822 051 20122	1K20 5% 0,1W	6915	4822 130 83856	VSL03360
3919	4822 051 20182	1K80 5% 0,1W	6916	4822 130 83856	VSL03360
3920	4822 051 20182	1K80 5% 0,1W	6917	4822 130 83856	VSL03360
3921	4822 051 20182	1K80 5% 0,1W	6918	4822 130 83856	VSL03360
3923	4822 051 20109	10Ω 5% 0,1W	6919	4822 130 83856	VSL03360
3930	4822 051 20472	4K70 5% 0,1W	6920	4822 130 83856	VSL03360
3939	4822 051 20153	15KΩ 5% 0,1W	6925	4822 130 83856	VSL03360
3957	4822 051 20153	15KΩ 5% 0,1W	6971	4822 130 83959	TLHR4900AS
3960	4822 051 20471	470Ω 5% 0,1W			
3961	4822 051 20109	10Ω 5% 0,1W			
3969	4822 051 20109	10Ω 5% 0,1W			
3971	4822 051 20331	330Ω 5% 0,1W			
3972	4822 051 20008	0Ω JUMP. (0805)			
3998	4822 117 12955	2K7 1% 0,1W 0805			

5100	4822 157 71433	120UH 10%LAL05TB121K	7251	4822 209 15585	TEA0675T/V2
5350	4822 242 80259	LN-G38-311 (4,332MHZ)	7257	4822 209 83159	LA2000 (SANYO)
5400	4822 157 71206	BLM21A601SPT	7258	4822 130 60511	BC847B
5570	4822 157 70839	COIL ASSY 160H 5A	7350	4822 209 33985	TDA8579T/N1
5570	4822 157 70935	160 UH 5A	7354	4822 209 32745	TEA6320/V1
5600	4822 157 52983	22UH 10%	7355	4822 209 31981	SAA6579T
5601	4822 242 81959	CST11.5MTW	7356	4822 209 32742	TL074IN
5603	4822 242 81002	CST6,00MGW-TF01	7357	4822 130 60511	BC847B
5604	4822 157 60122	4U7 10 %	7362	5322 130 60508	BC857B
5605	4822 157 60122	4U7 10 %	7550	4822 209 31132	TDA7374V PINN.VERTIC
5606	4822 157 71206	BLM21A601SPT	7550	4822 209 90404	TDA7374B
5961	4822 242 81959	CST11.5MTW	7551	4822 209 31132	TDA7374V PINN.VERTIC
			7551	4822 209 90404	TDA7374B
			7554	4822 130 60511	BC847B
			7555	5322 130 60508	BC857B
6352	5322 130 30684	1N4002RL	7600	4822 209 16037	P83CE558EFB/112
6354	5322 130 34337	BAV99	7601	4822 900 10724	ST24C16CB6
6355	4822 130 83757	BAS216	7602	5322 209 10468	HEF4521BP
6403	5322 130 34337	BAV99	7603	4822 209 32743	MSM6307GS
6575	4822 130 10488	S3G	7609	4822 130 60511	BC847B
			7800	4822 209 33029	TDA3602/N3
			7803	4822 130 40995	BD438
			7805	4822 130 60511	BC847B
			7823	4822 130 60511	BC847B
			7824	4822 130 60511	BC847B

7826	4822 209 12628	HEF4044BT
7827	5322 130 60508	BC857B
7828	5322 130 60508	BC857B
7829	5322 130 60508	BC857B
7925	4822 130 42615	BC817-40
7961	4822 209 16916	P83CE528EFB/023

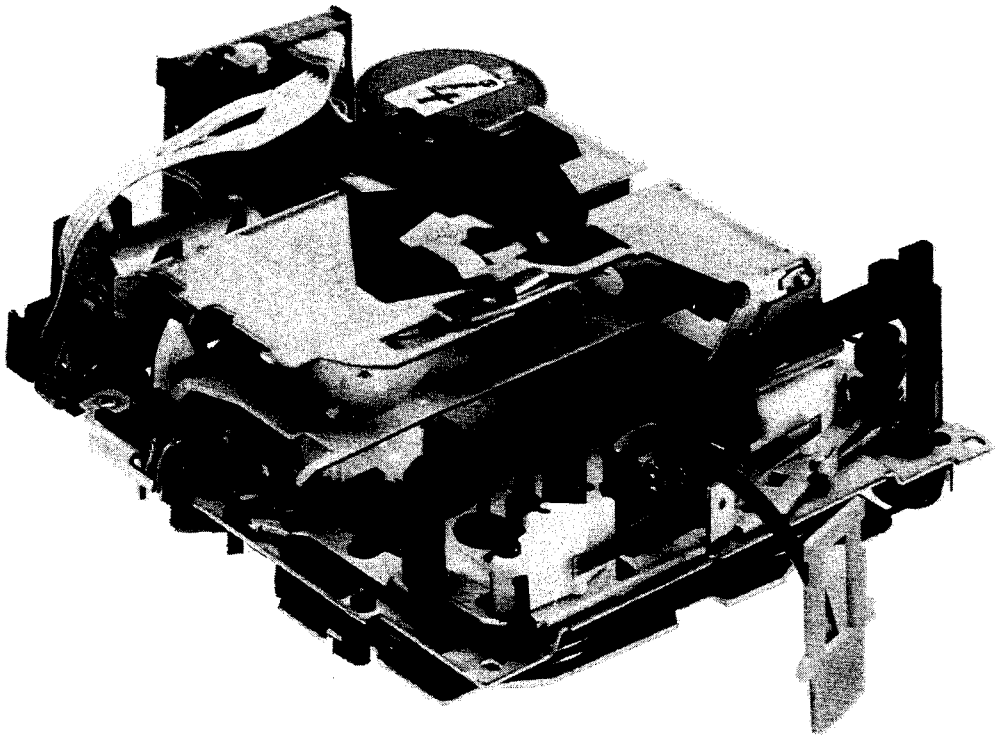
Car cassette deck SCA

Version 4.4

Service
Service
Service

Service Manual

12 V ⊖—|||



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MECHANICAL SPECIFICATION

Operating positions:	Any position from horizontal to 45° standing vertically on the rear side.
Operating temperature:	-20°C to +70°C
Tape speed:	4,76 cm/sec
Wow and flutter:	< 0,5% unweighted
	< 0,3% weighted
Winding time:	
Test tape: RCA 118 (C60)	< 110 sec
Eject and loading time:	< 2 sec

ELECTRICAL SPECIFICATION

Voltage:	min 10,6 V max 16,0 V
Current - playback:	200 mA
Current - fast wind:	150 mA
Current - eject, standby:	100 µA
Hold in voltage:	8,0 V
Capstan motor:	14,4 V
Servo motor:	2 V DC Play
	11,5 V DC Fast, Servo
Playback Crosstalk	
ch. 1 - 2 / 3 - 4	> 36 dB
ch. 2 - 3	> 46 dB

FEATURES

The SCA-4.4 tape deck is usable in several sets. Most of the control functions depend on the hard- and software-configuration of the set in which the deck is installed.
The set µC can control soft eject, emergency eject, standby mode, reverse function, MSS, ME/FE and DOLBY indication.
Some versions of the deck could be equipped with a groved head and/or a preamplifier circuit.

HANDLING AND DEMOUNTING INSTRUCTIONS

GENERAL

- Protect the tape deck against ESD !
- Plastic catches and snap connections must be released careful with screwdriver or tweezers.
- Cables must be laid in the defined cable guidings after mounting.
- For lubrication see indications in the exploded view.
- To clean tape transport and head only use moist cleaning tapes or piece of cloth, take care that no fluid (alcohol) drops into the bearing.
- For transport lift/carrier assy must be in eject position, do not carry the deck by touching the lift/carrier.
- Use a screwdriver 2,5 mm with insulated shaft for adjusting drift.
- Screw the deck into the set in order: Front right, front left, rear left, rear right.

10. ON/OFF Switch (26)
10.1 Desolder connection cables
10.2 Lever up switch or push with a small pin through the hole at the bottom of the chassis, directly under the switch if servo motor and clutch were removed previously

11. Control pins (16), gear lever (17), play reverse lever (18)
11.1 Remove flywheels acc. 7
11.2 Remove play reverse lever
11.3 Put control pins into mounting position acc. fig.6-D,E
11.4 Take out gear lever
11.5 Pull out control pins

12. Switching lever (20), swivel wheel assembly (7,15,43)
12.1 Release spring (53) from black plastic pin
12.2 Turn switching lever acc. fig.7-A
12.3 Lever up switching lever from axle
12.4 Remove connection wheel acc. 8
12.5 Take out swivel wheel assembly

13. Switching pin (54), transport rod (25), latch (21)
13.1 Remove ON/OFF Switch acc. 10
13.2 Lever up switching pin from axle
13.3 Remove switching lever acc. 12
13.4 Move out transport rod and latch

TOOLS REQUIRED

Test cassette SBC 420	4822 397 30071
Test cassette SBC 419	4822 397 30069
Friction test cassette	4822 395 30054
Puller for clutch (fig.2)	4822 395 60039

ADJUSTMENTS

TORQUE OF REELS (FRICTION)

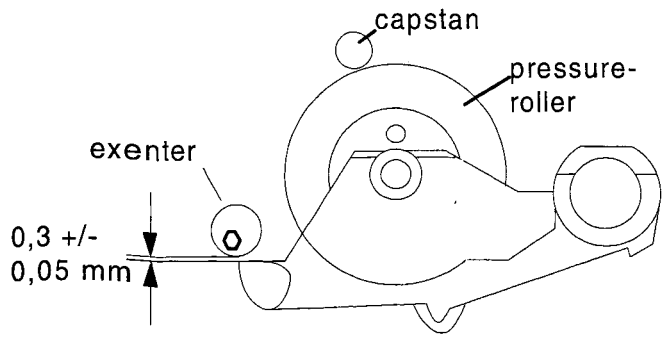
Adjust potmeter pos. 3409 until friction test cassette shows 9,5 +/- 1,5 mNm in NOR direction (after 2 minutes) and 8,5 +/- 1,5 mNm in REV direction. Backtension must be 0,3 to 0,7 mNm.
If values deviate check lubrication, clutch, take up wheels and backtension springs.

WOW AND FLUTTER, TAPE SPEED

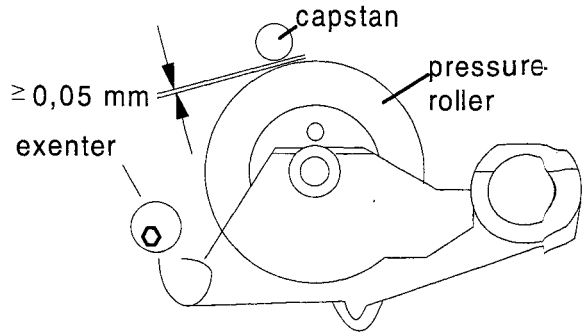
Connect wow and flutter meter to loudspeaker outputs and play the 3150 Hz signal track of test cassette SBC 420.
Value should be max. 0,5% (unweighted).
If value deviates check motors, pressure rollers, flywheels, belt, pulley and backtension springs.
Tape speed can be adjusted with motor potentiometer A (see fig.8). Use a screwdriver with insulated shaft !

PRESSURE ROLLER / CAPSTAN (see figures below)

Adjust clearance play-NOR position between pressure roller and stop head carrier



Adjust clearance FFW position between pressure roller and capstan



SCA-4.4

EJECTOR 48, HOLDER 49, LIFT 44

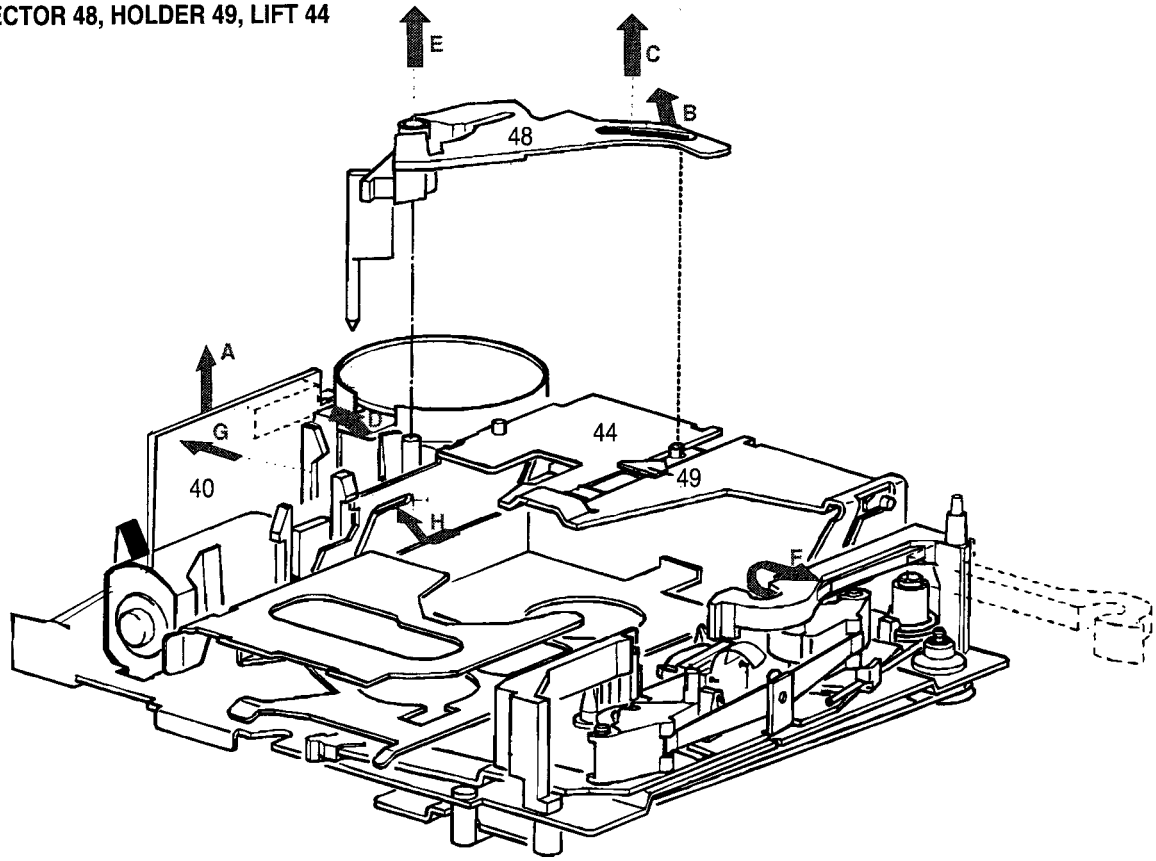


Fig. 1

CLUTCH 59, SWITCH 60, GEAR WHEEL 5, CARRIER 6

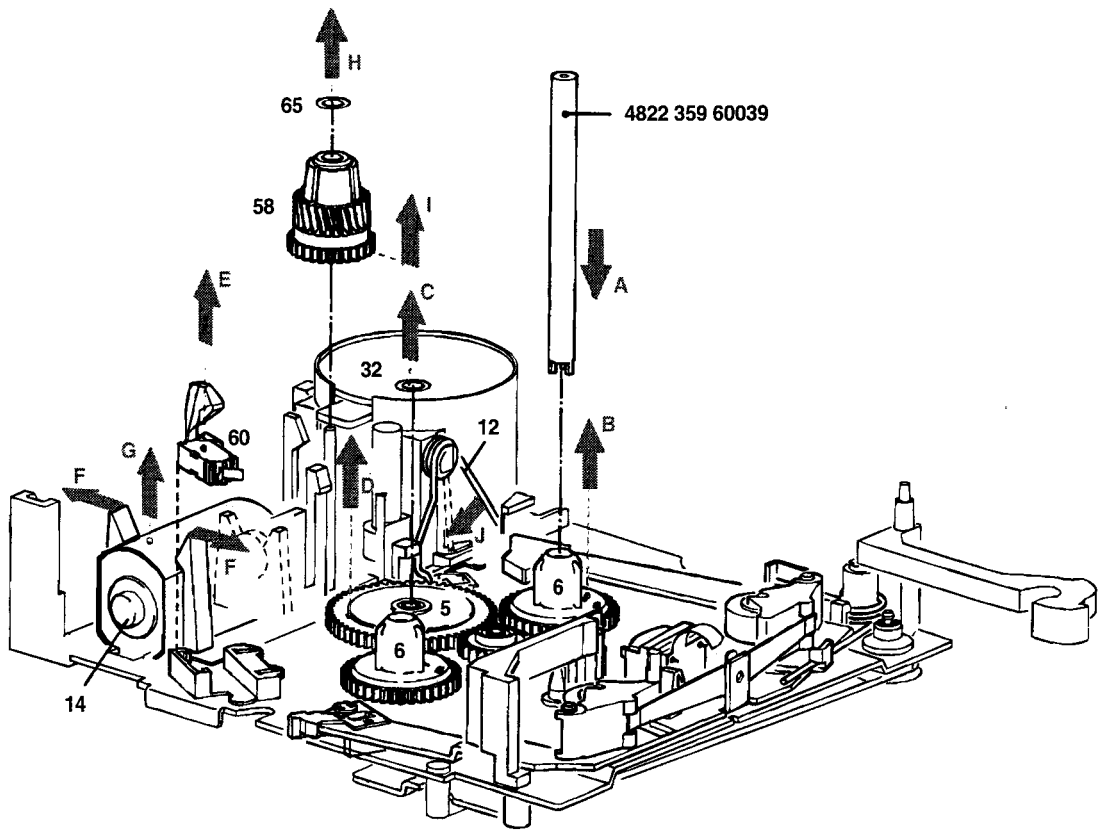


Fig. 2

PRESSURE ROLLER 45, HEAD BRACKET 33, HEAD 34

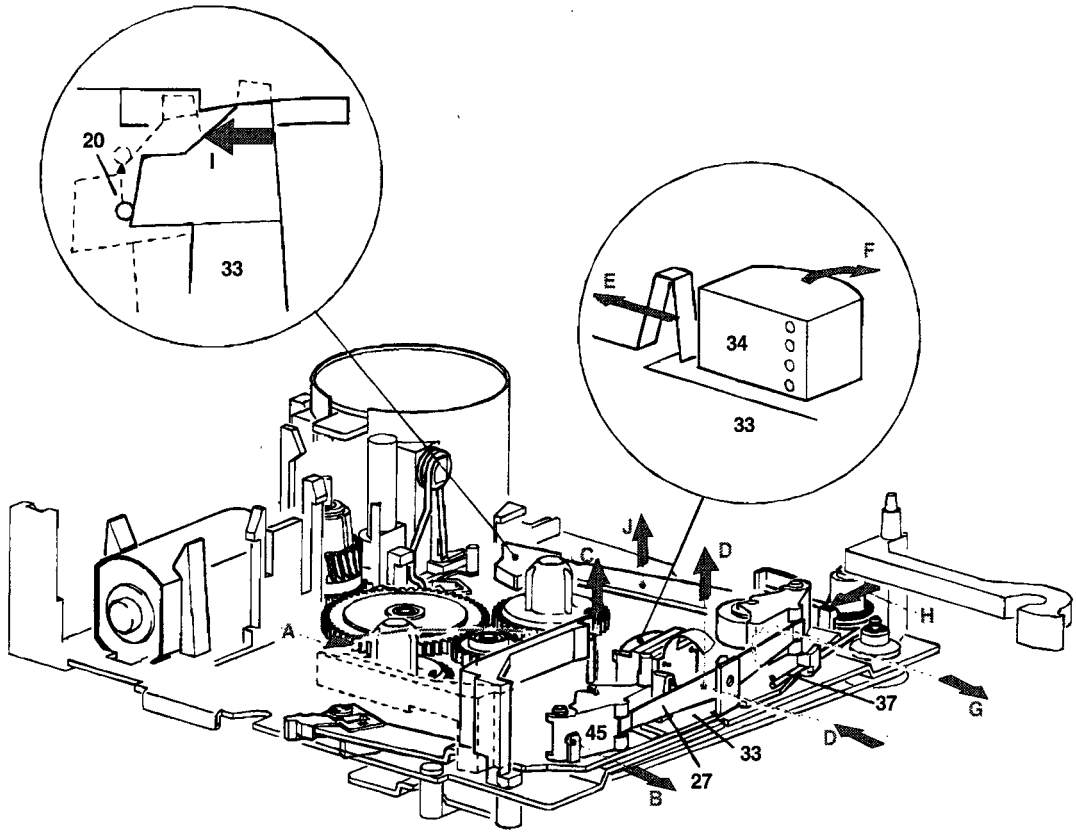


Fig. 3

ANCHOR 3/5, RELAY 1

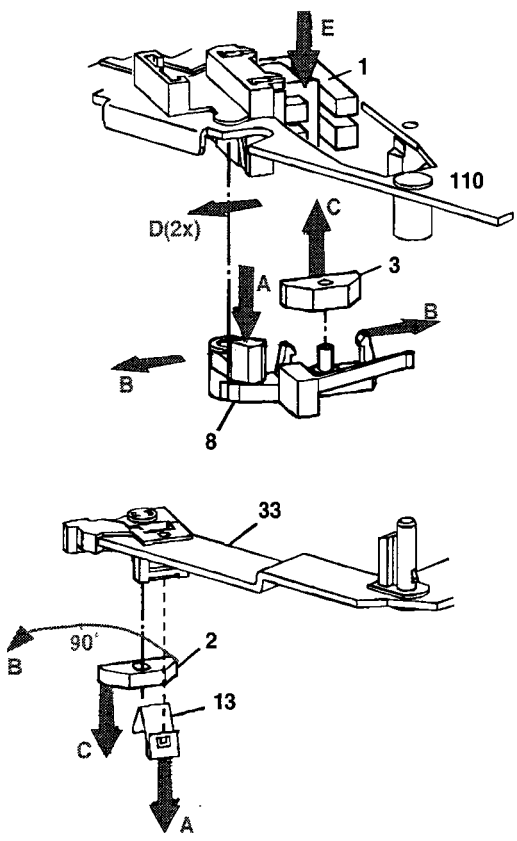


Fig. 4

FLYWHEEL 23, BELT 30

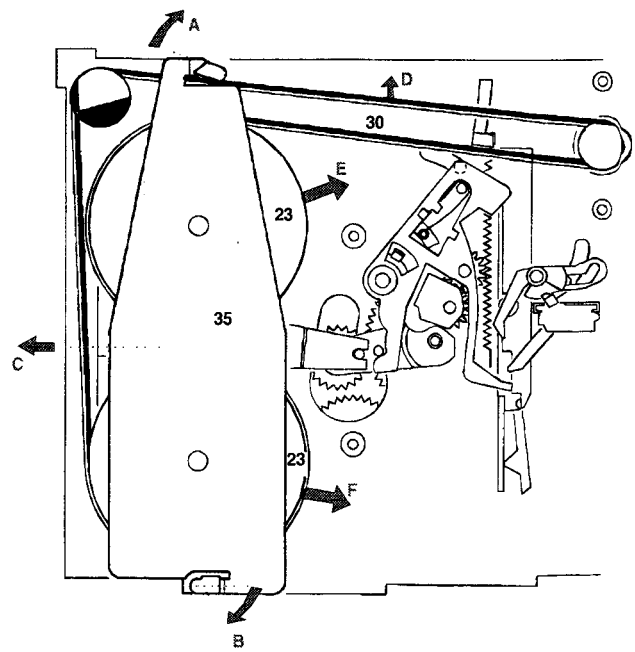


Fig. 5

SEGMENT 16, BRACKET 17, BEARING 70

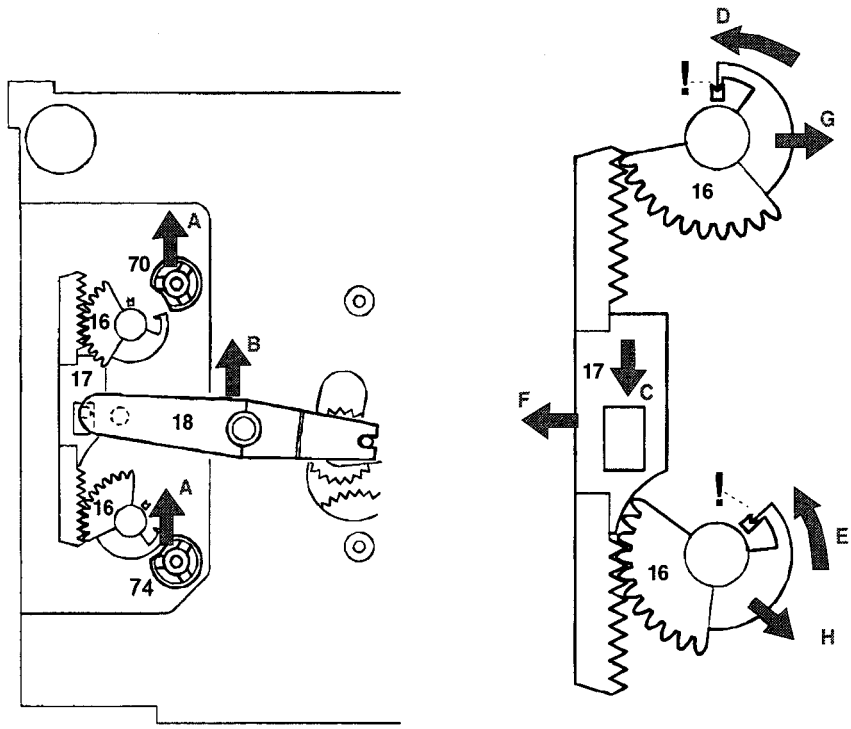


Fig. 6

SWITCH 26, SWIVEL GEAR 7, LEVER 20

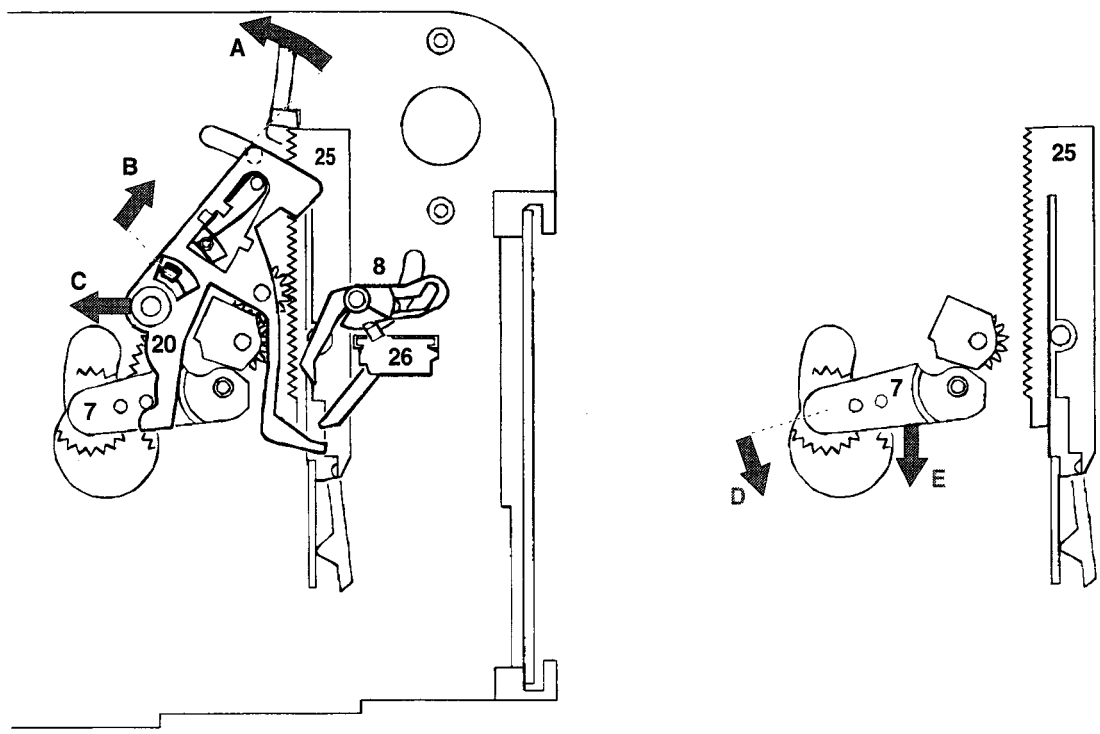


Fig. 7

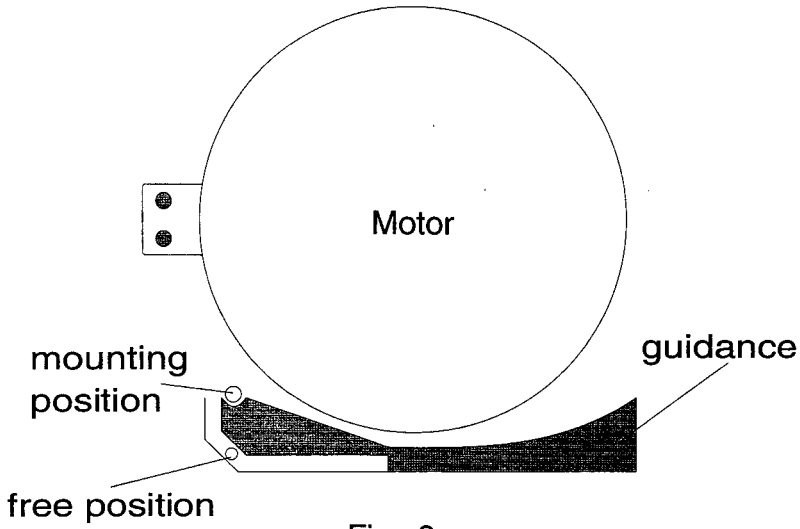
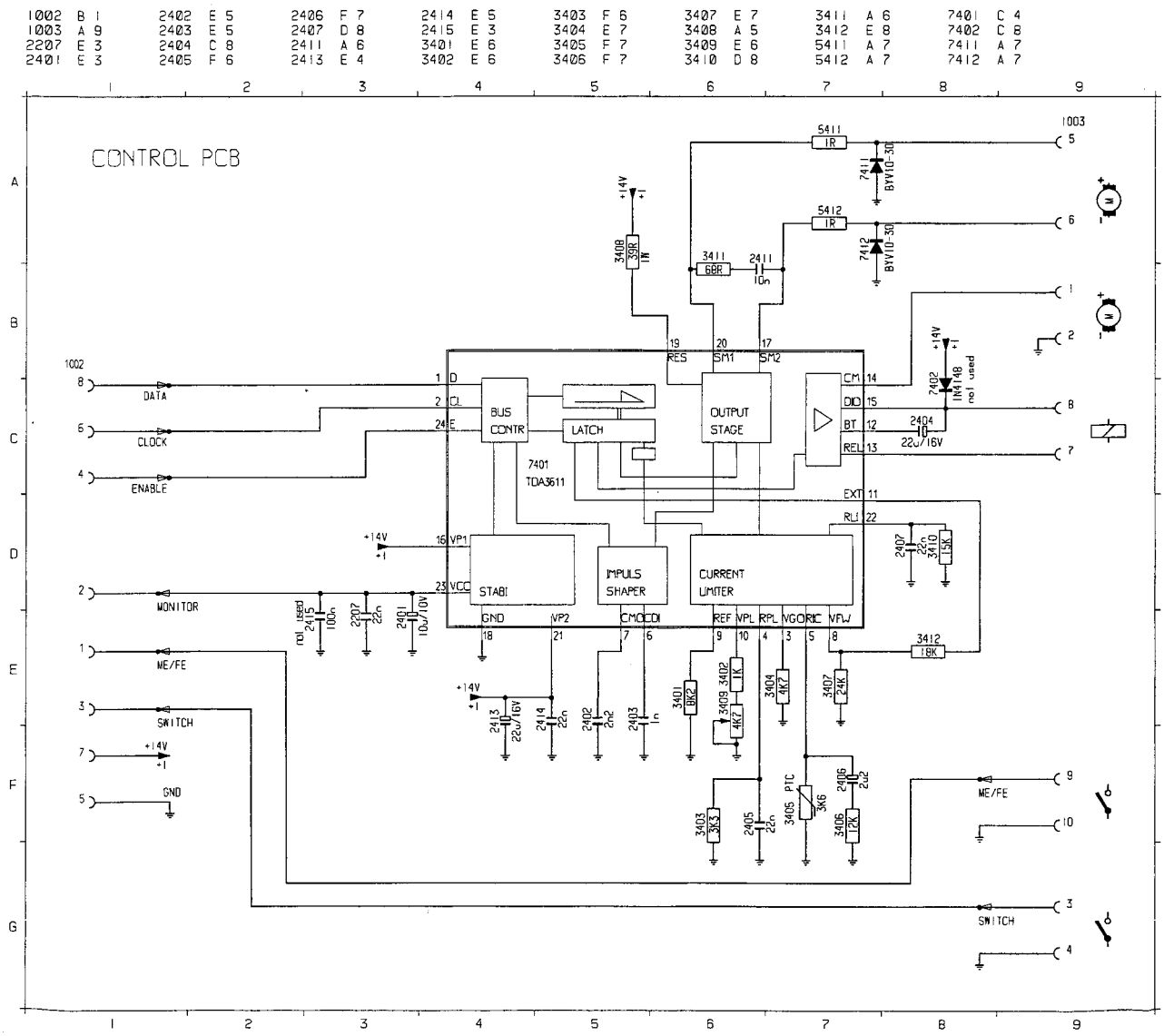

Motor
mounting position
guidance
free position

Fig. 8


1002 B 1
1003 A 9
2207 E 3
2401 E 3
2402 E 5
2403 E 5
2404 C 8
2405 F 6
2406 F 7
2407 D 8
2411 A 6
2413 E 4
2414 E 5
2415 E 3
3401 E 6
3402 E 6
3403 F 6
3404 E 7
3405 F 7
3406 F 7
3407 E 7
3408 A 5
3409 E 6
3410 D 8
3411 A 6
3412 E 8
5411 A 7
5412 A 7
7401 C 4
7402 C 8
7411 A 7
7412 A 7
CONTROL PCB
DATA
CLOCK
ENABLE
MONITOR
ME/FE
SWITCH
GND
BUS CONTR
LATCH
OUTPUT STAGE
7401 TDA3611
STABI
IMPULS SHAPER
CURRENT LIMITER
not used
not used

MEASUREMENTS ON CONTROL PCB

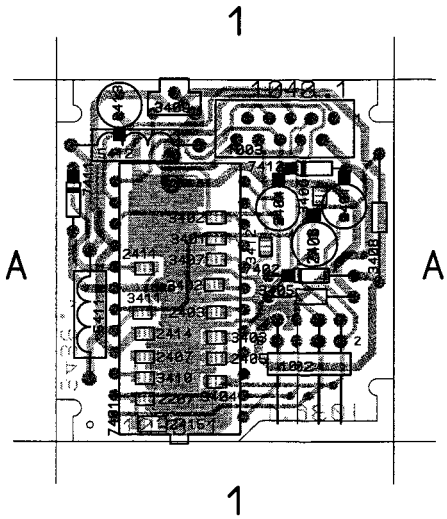
ME/FE: 0,0 V (FE) / 5,0 V (ME/CR)
ON/OFF: 0,0 V (ON) / 5,0 V (OFF)

Pos. 7401 TDA 3611

1: 5,0 V
2: 5,0 V
3: 0,7 V / 0,0 V (Sb)
4: 0,8 V (PN) / 0,9 V (PR) / 0,3 V (W) / 0,0 V (Sb)
5: 0,8 V (PN) / 1,0 V (PR) / 0,4 V (W) / 0,0 V (Sb) / 0,1 V (TA)
6: 0,8 V (PN) / 1,0 V (PR) / 0,4 V (W) / 0,0 V (Sb) / 0,1 V (TA)
7: 0,7 V (P) / 1,8 V (W) / 0,0 V (Sb) / 0,6 V (TA)
8: 3,4 V / 0,0 V (Sb)
9: 1,2 V / 0,0 V (Sb)
10: 0,5 V / 0,0 V (Sb)
11: 3,4 V / 0,0 V (Sb)
12: 12,0 V
13: 0,5 V / 12,0 V (Sb)
14: 0,0 V / 11,5 V (P)
15: 11,5 V / 12,0 V (Sb)
16: 12,0 V
17: 0,1 V (PN) / 2,4 V (PR) / 0,0 V (WN) / 12,0 V (WR) / 0,0 V (Sb)
18: GND
19: 12,0 V / 8,5 V (P)
20: 2,4 V (PN) / 0,1 V (PR) / 12,0 V (WN) / 0,0 V (WR) / 0,0 V (Sb)
21: 12,0 V
22: 3,6 V (P) / 1,3 V (W) / 0,0 V (Sb)
23: 5,0 V
24: 5,0 V
All values measured DC - GND

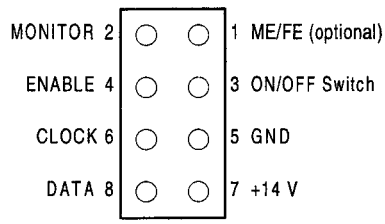
(P) = Play mode both directions
(W) = Wind mode both directions
(PN) = Play NOR direction
(PR) = Play REV direction
(WN) = Wind NOR direction
(WR) = Wind REV direction
(Sb) = Standby
(TA) = Traffic anouncement

1002 A 1	2413 A 1	3409 A 1
1003 A 1	2414 A 1	3410 A 1
2207 A 1	2415 A 1	3411 A 1
2401 A 1	3401 A 1	3412 A 1
2402 A 1	3402 A 1	5411 A 1
2403 A 1	3403 A 1	5412 A 1
2404 A 1	3404 A 1	7401 A 1
2405 A 1	3405 A 1	7402 A 1
2406 A 1	3406 A 1	7411 A 1
2407 A 1	3407 A 1	7412 A 1
2411 A 1	3408 A 1	

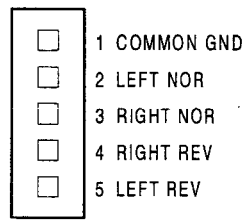


CONNECTORS

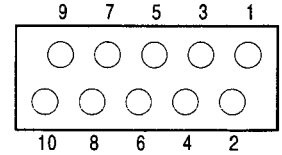
Control Connector
(View onto Radio-PCB)



Head Connector
(View onto Radio-PCB)

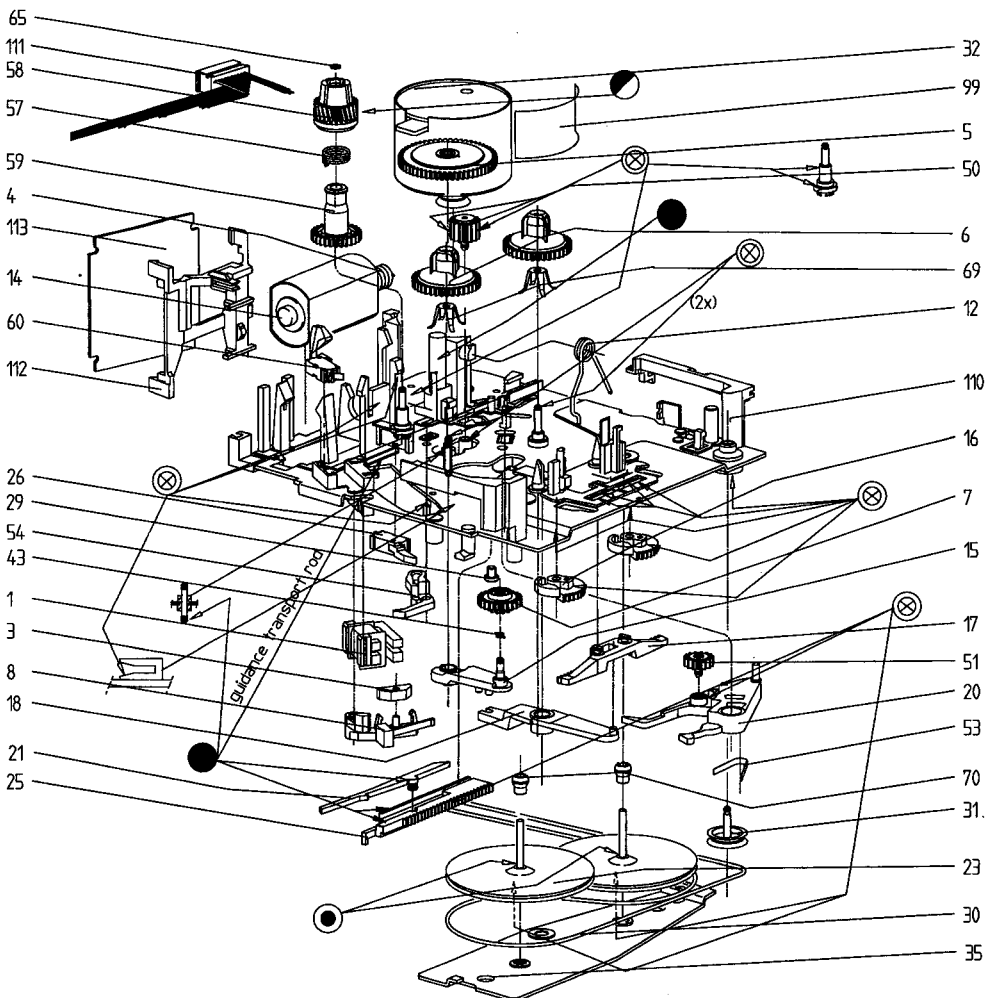


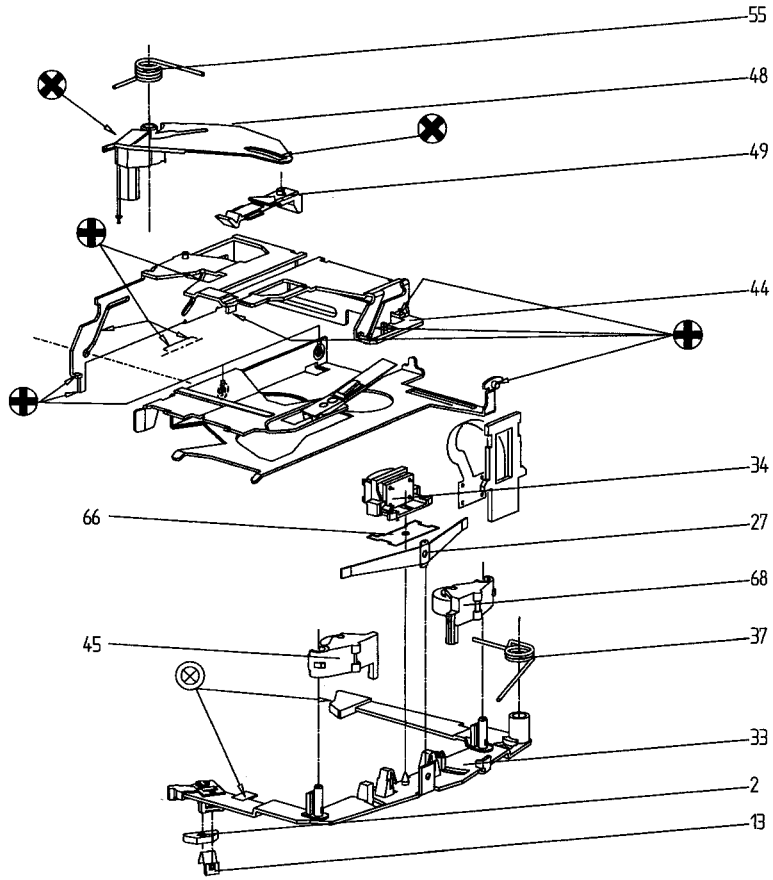
Deck Connector (Pos.1003)
(View onto Control-PCB)



1: Capstan +
2: Capstan -
3: ON/OFF Switch
4: GND
5: Servomotor +
6: Servomotor -
7: Magnet -
8: Magnet +
9: ME/FE Switch
10: GND

Front of Radio ↓





- Gleitmo 805 K
- Mobil SHC 634
- Contact Oel PDP 65
- Topas L30
- Gleitmo 585 K
- SM30 TF

MECHANICAL PARTS

1	4822 281 11051	DOUBLE
2	4822 404 21083	ANCHOR ON SUPPORT 33
3	4822 404 21084	ANCHOR IN HOLDER 8
5	4822 522 32868	WHEEL IDLER
6	4822 528 10776	CARRIER
7	4822 528 70658	ASSY
8	4822 404 21087	FOR ANCHOR 2
1	4822 492 70556	FOR ANCHOR 2
14	4822 361 30297	SERVO ASSY
16	4822 522 32869	NORMAL/REVERSE
17	4822 404 21089	DRIVING 16
20	4822 404 21086	ASSY SERVO GEARWHEEL
23	4822 528 81378	FLYWHEEL
26	4822 277 11215	ON/OFF
27	4822 492 70557	FOR PRES. ROLLER 45
29	4822 502 12548	FIX MOTOR 32
30	4822 358 31053	BELT, DRIVING
31	4822 528 81144	DIVERTING BELT
32	4822 361 30294	CAPSTAN
33	4822 404 21088	FOR HEAD,PRES.ROLLR
34	4822 249 30157	WITH FLEXPRINT
44	4822 466 82631	FOR CASSETTE
45	4822 528 81377	REVERSE
48	4822 404 21091	EJECT
49	4822 404 21092	HOLDING CASSETTE
50	4822 522 32871	COUPLING
59	4822 522 10435	ASSY
60	4822 277 11216	ME/CR
65	4822 532 52348	FOR CARRIER CLUTCH
68	4822 528 81449	NORMAL
69	4822 492 70926	UNDER CARRIER
70	4822 520 30539	FOR FLYWHEEL
111	4822 321 61954	CABLE, CONNECT
112	4822 256 92048	FOR PCB
113	4822 214 52077	PCB KOMPL.

ELECTRICAL PARTS

2207	5322 122 32654	22NF10%X7R 63V
2401	4822 124 22748	10UF 10V
2402	4822 122 33127	2,2NF10%X7R 63V
2403	4822 122 33178	1NF 20% X7R 50V
2404	4822 124 23279	22UF20% 16V
2405	5322 122 32654	22NF10%X7R 63V
2406	4822 124 41013	2,2UF 25V
2407	5322 122 32654	22NF10%X7R 63V
2411	4822 122 33177	10NF 20% X7R 50V
2413	4822 124 23279	22UF20% 16V
2414	5322 122 32654	22NF10%X7R 63V
3401	4822 051 20822	8K20 5% 0,1W
3402	4822 051 20102	1K00 5% 0,1W
3403	4822 051 20332	3K30 5% 0,1W
3404	4822 051 20472	4K70 5% 0,1W
3405	4822 116 40241	3K6 PTC
3406	4822 051 20123	12K00 5% 0,1W
3407	4822 051 20243	24K00 5% 0,1W
3408	4822 053 10399	39R00 5% 1W
3409	5322 101 11014	5K POTMETER
3410	4822 051 20153	15K00 5% 0,1W
3411	4822 051 20689	68R00 5% 0,1W
3412	4822 051 20183	18K00 5% 0,1W
5411	4822 050 21008	1R00 1% 0,6W
5412	4822 050 21008	1R00 1% 0,6W
7401	4822 209 32207	TDA3611
7411	4822 130 32911	BYV10-30
7412	4822 130 32911	BYV10-30

AIDS AND TOOLS

100	4822 390 10107	ISOFLEX PDP65
101	4822 390 20128	TOPAS L30
103	4822 390 10123	MOBIL OIL SHC 634
104	4822 390 20027	GLEITMO 805K
105	4822 390 20128	L30 TF
107	4822 390 20139	GLEITMO 585K